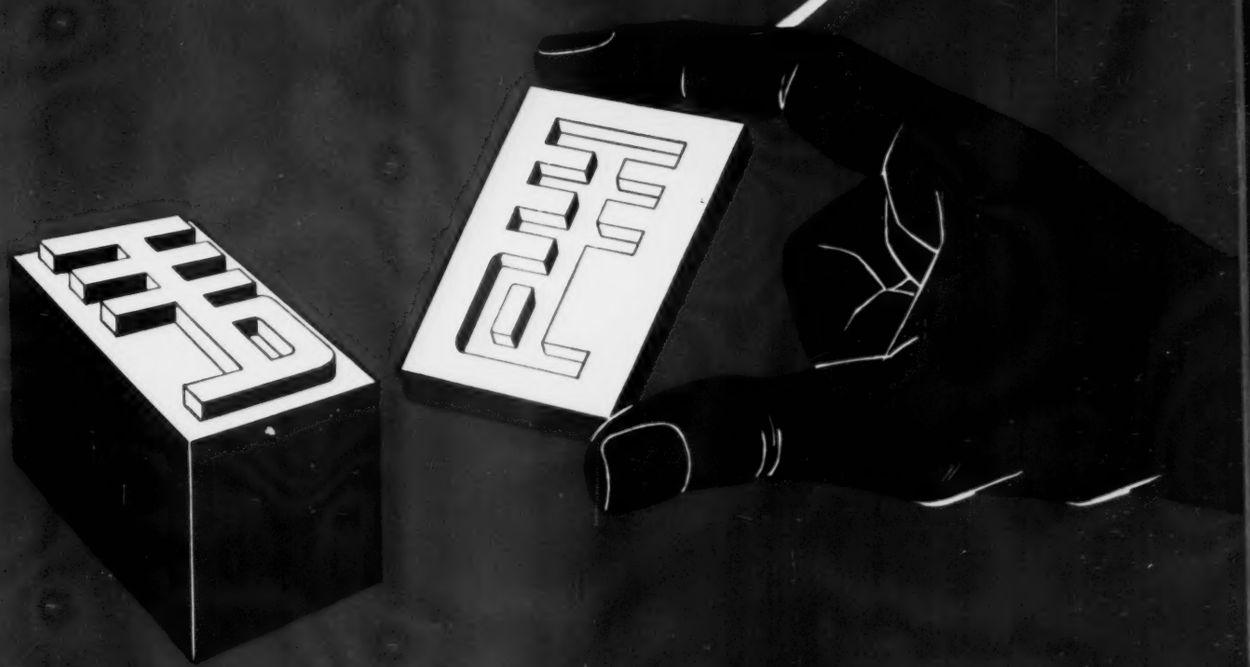
FEBRUARY 1952

PLEASE ROUTE THIS COPY TO	
Manager	Pressroom Foreman
Production Mgr.	Bindery Foreman
Plant Supt.	Mailing Foreman
Platemaking Foreman	Maintenance Supt.
Composing Foreman	Purchasing Agt.
For filing, please return to	

PRINTING EQUIPMENT *Engineer*



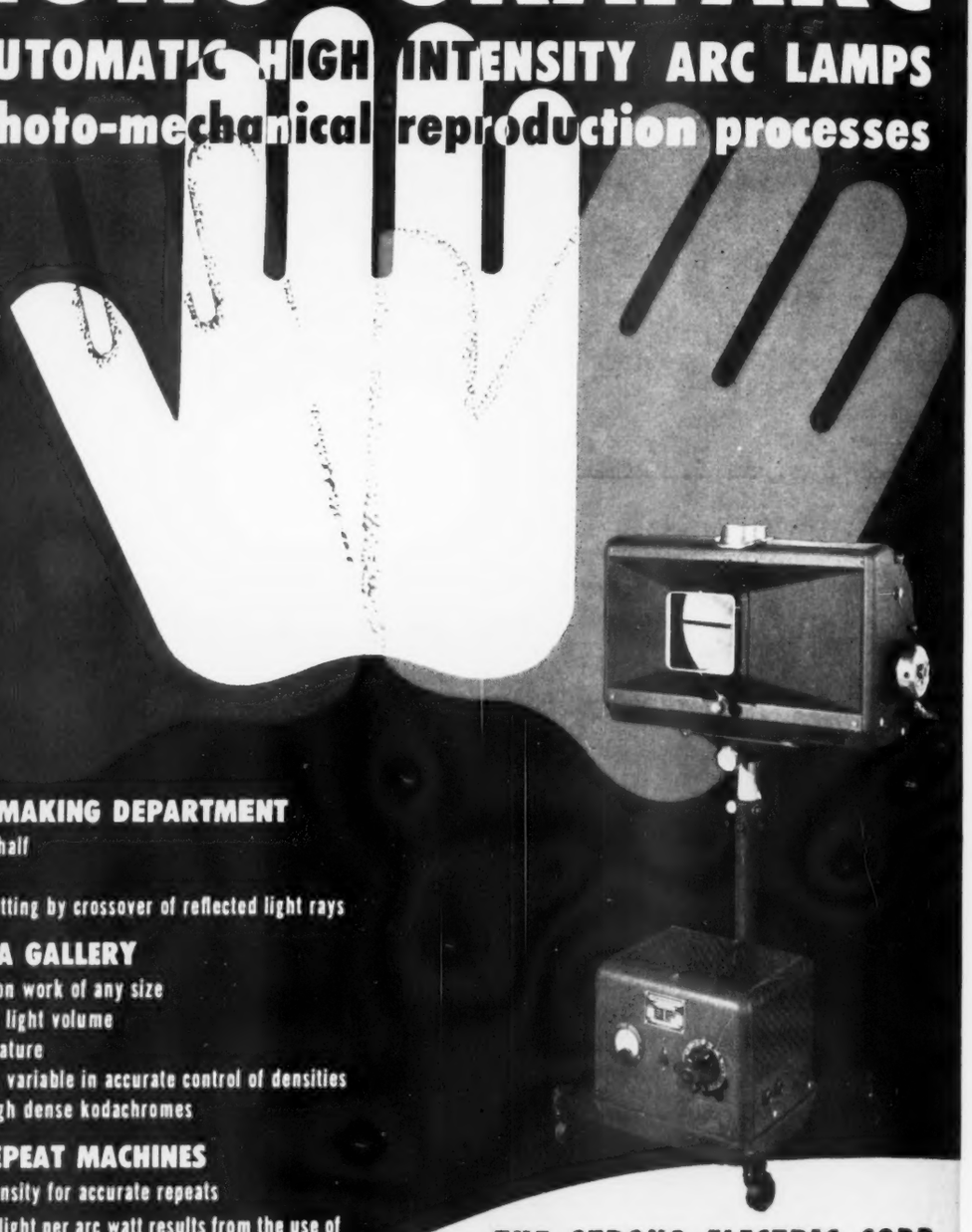
AN INDUSTRY-WIDE TECHNICAL PUBLICATION

Stop and Consider

why more people choose

STRONG GRAFARC

FULLY AUTOMATIC HIGH INTENSITY ARC LAMPS for all photo-mechanical reproduction processes



IN YOUR PLATE MAKING DEPARTMENT

- Cut exposure time in half
- Assure sharper dots
- Eliminate dot undercutting by crossover of reflected light rays

IN YOUR CAMERA GALLERY

- Uniform illumination on work of any size
- Extreme steadiness of light volume
- Constant color temperature
- Eliminate illumination variable in accurate control of densities
- Power to punch through dense kodachromes

ON STEP AND REPEAT MACHINES

- Precise control of intensity for accurate repeats

Approximately twice the light per arc watt results from the use of a silvered glass reflector, instead of a metal reflector. Adapters to fit most cameras and photo-composing machines. Present line supply wiring is usually adequate.

THE STRONG ELECTRIC CORP.
307 City Park Avenue Toledo 2, Ohio

Please send free literature and prices.

NAME .....

FIRM .....

STREET .....

CITY & STATE .....

"STEREOTYPERS' CHOICE" FOR CURVED PLATE ROUTING

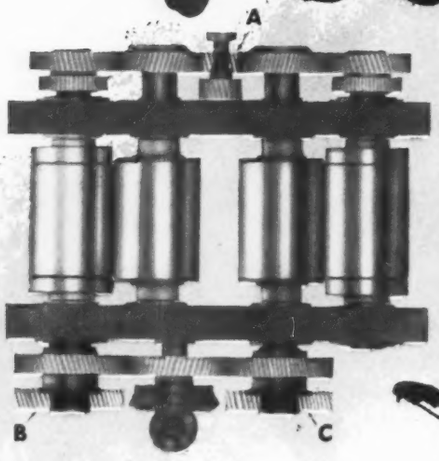
NEW, STA-HI DESIGNED, HIGH SPEED ROUTER HEAD
GLARE-PROOF, SHADOW-PROOF IMPROVED LIGHTING SYSTEM
COMPLETELY ENCLOSED WITH STEEL AND SAFETY GLASS FOR SAFE, QUIET OPERATION
PRECISION BALANCED CYLINDER-CAN BE BUILT TO MATCH DOUBLE PAGE PLATES, OR TO ROUTE TWO DIFFERENT SIZES OF PLATES
STA-HI's EXCLUSIVE POWER-DRIVEN TRAVERSE FEED—FOR EASY, RAPID PLATE "STRIPPING"
END PANELS INSTANTLY RE-MOVABLE FOR LUBRICATION, MAINTENANCE AND ADJUSTMENTS
NO CHIPS ON FLOOR! THEY DROP INTO HOPPER DRAWER, EASILY EMPTIED BY ONE MAN
HANDY TOOL DRAWER—ONE OF MANY FEATURES PRO-VIDED FOR STEREOTYPER'S CONVENIENCE AND COMFORT

STA-HI MASTER ROUTER

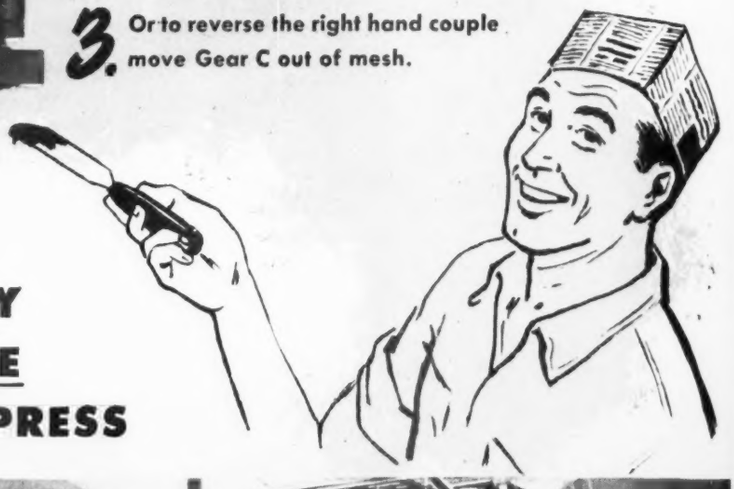
- More and more, in progressive newspaper publishing plants where men and machinery "team up" to do the best possible job, you'll find that the STA-HI Master Router is the first choice of the stereotype craftsmen who actually do the work of routing curved plates.
- The reason is that the Master Router has been designed and improved to suit the exacting requirements of this important, precision operation — and to make it easier for the operator.
- The stereotyper works without eye-strain, without danger and annoyance of flying metal chips—in comfort and safety He turns out a better job, in less time—boosts production output, cuts production costs.
- If you are "worrying along" with outmoded curved routing equipment, you owe it to yourself to get complete information on the STA-HI Master Router.

STA-HI CORPORATION 235 West Washington Boulevard, Box 152, Whittier, California

T COULD BE SIMPLER?



1. To reverse the printing couples for color move Gear A into mesh.
2. Then to reverse the left hand couple move Gear B out of mesh.
3. Or to reverse the right hand couple move Gear C out of mesh.

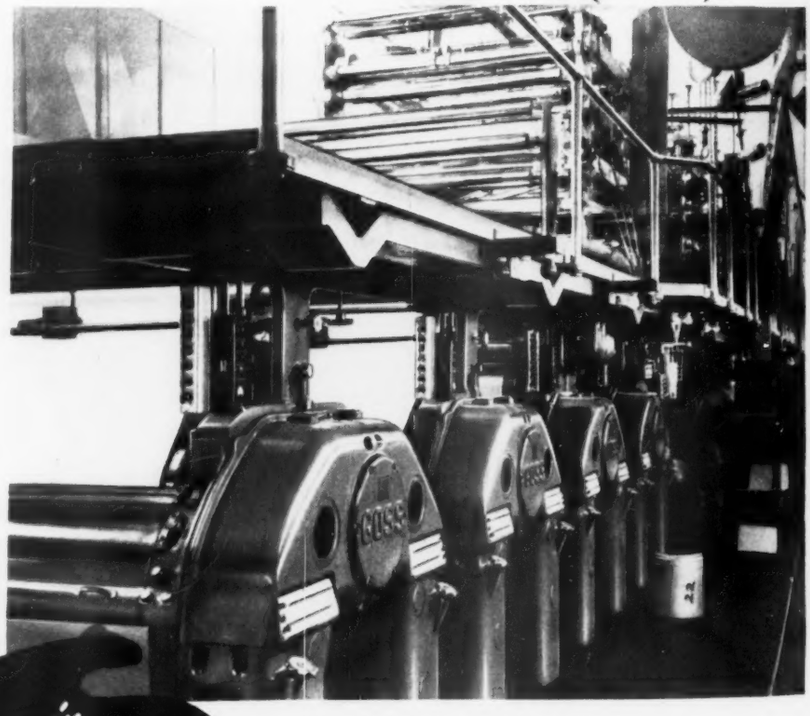


COLOR COMES EASY WITH THE FLEXIBLE GOSS HEADLINER PRESS

To meet all requirements, a selection of color cylinders with or without separate impression cylinders used in conjunction with the standard unit gives one, two, or three color and black pages in a maximum number of positions throughout the newspaper.

Even when installed as a black-and-white press, the Goss Headliner can be adapted to color by adding color cylinders or reversing mechanisms . . . **without major changes in the press structure!**

Refer your specific color requirements to Goss and learn how simply and economically you can handle them with the Goss HEADLINER—*pre-engineered for color.*



it's GOSS again

THE GOSS PRINTING PRESS COMPANY
1535 S. Paulina St., Chicago 8, Illinois
Goss Printing Press Co. Ltd., Preston, England

World's largest printer-slotter runs 120 sheets a minute on TIMKEN® bearings

ONE hundred and twenty 75″ x 180″ sheets a minute! Or a maximum sheet of 90″ x 180″ by skip feeding!

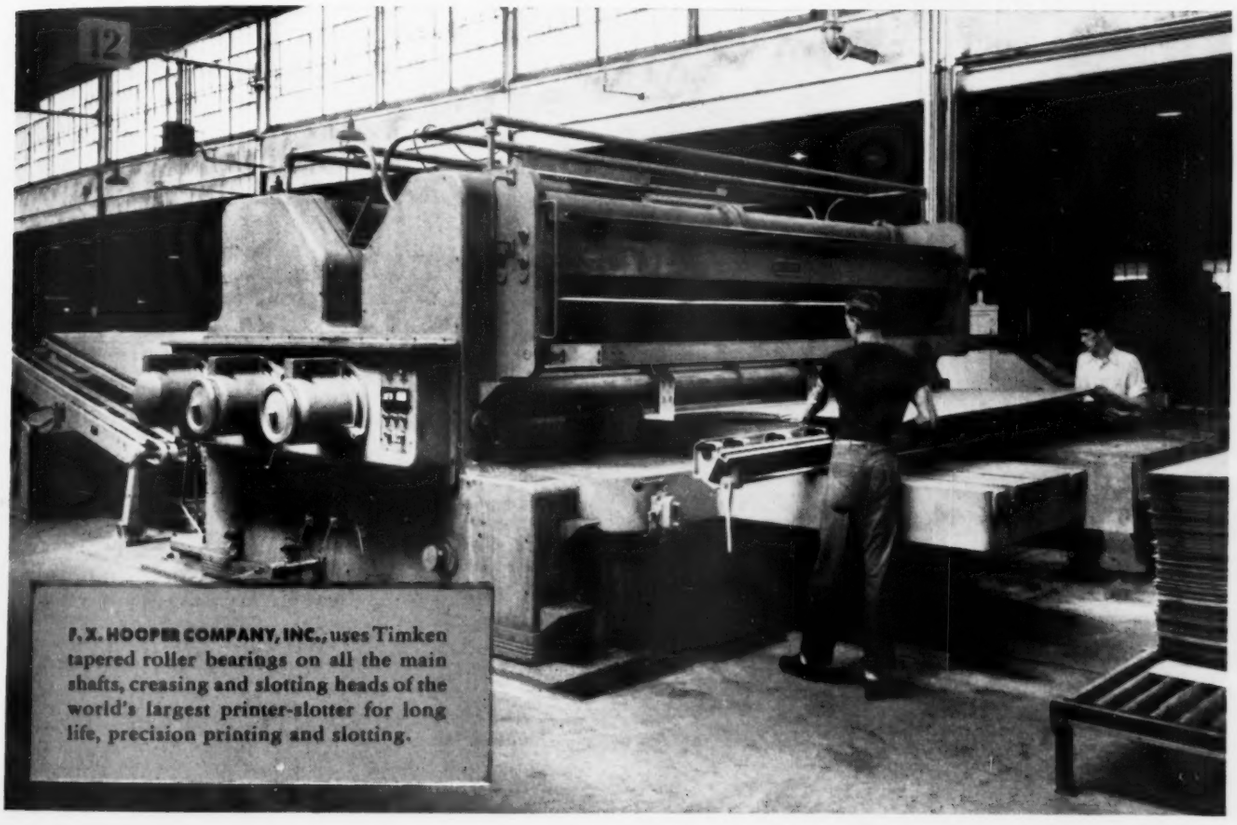
That's the production capacity of the world's largest, two-color printer-slotter shown below. Built by F. X. Hooper Company, Inc., and used in the box-making industry, it is now seeing daily service in a midwestern plant. To keep it on the job with a minimum of maintenance and time-out for repairs, and to take the terrific shock loads of the impact cutters, engineers of Hooper have mounted all the main shafts, creasing heads and slotting heads on Timken® tapered roller bearings.

Due to their tapered construction, Timken bearings take radial and thrust loads in any combination. Shafts and slotting and creasing heads are held in proper alignment, wear on moving parts reduced.

True rolling motion and incredibly smooth surface finish of Timken bearings practically eliminate friction. Lubrication time and maintenance are minimized because Timken bearings make closures more effective. Under normal conditions, they will normally last the life of the machine.

Whether you buy printing equipment or build it, be sure to specify Timken tapered roller bearings. No other bearing can offer all the advantages of Timken bearings. Look for the trade-mark "Timken" on every bearing. The Timken Roller Bearing Company, Canton 6, Ohio. Canadian plant: St. Thomas, Ontario. Cable address: "TIMROSCO".

This symbol on a product means its bearings are the best.



F. X. HOOPER COMPANY, INC., uses Timken tapered roller bearings on all the main shafts, creasing and slotting heads of the world's largest printer-slotter for long life, precision printing and slotting.

FINISHED TO CLOSER TOLERANCES

Finishing to incredible smoothness accounts for much of the precise, smooth rolling performance of Timken bearings. This honing operation is typical of the amazingly accurate manufacturing methods at the Timken Company.

The Timken Company is the acknowledged leader in: 1. advanced design; 2. precision manufacturing; 3. rigid quality control; 4. special analysis steels.

TIMKEN

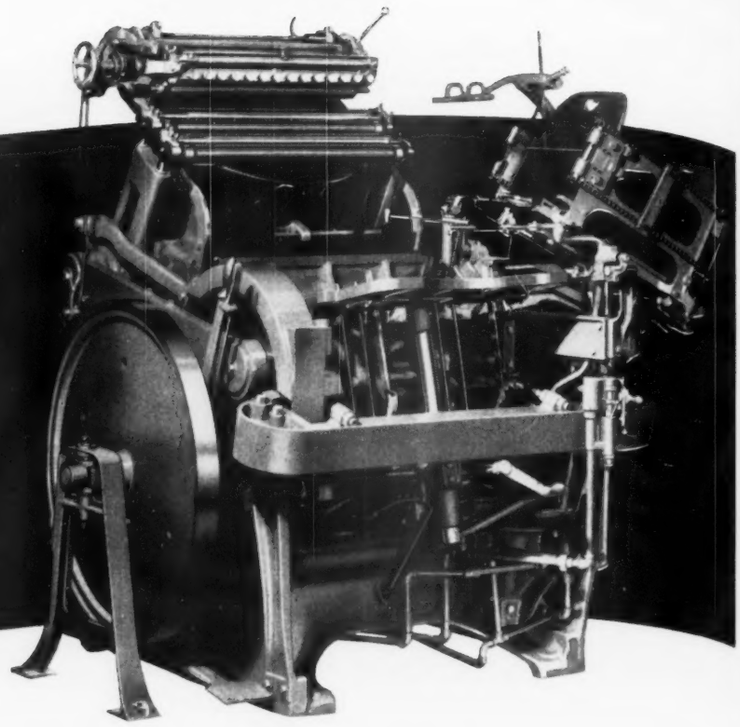
TRADE-MARK REG. U. S. PAT. OFF.

TAPERED ROLLER BEARINGS

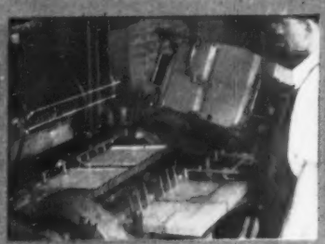
NOT JUST A BALL ○ NOT JUST A ROLLER ▭ THE TIMKEN TAPERED ROLLER ▭ BEARING TAKES RADIAL ◎ AND THRUST →◎← LOADS OR ANY COMBINATION →◎←

Do You

PRINT?
DIE CUT?
BLANK?
STAMP?
EMBOSS?



A Chandler & Price Super Heavy Duty Unit cutting and scoring photo-mount inserts.



The continuous feeding table and a two-up attachment on C&P Automatic Units make continuous operation of 3,000 to 4,000 per hour possible, even with very thick board.

Carton printing is fast and accurate. Depending upon size, several cartons can be printed at the same time.

Step *Up Front* in profitable, specialized operations with the

CHANDLER & PRICE SUPER HEAVY DUTY AUTOMATIC PRESS

● Truly automatic, including continuous feeding from hopper that permits loading while press is running (any stock from 13-lb. bond to heaviest cardboard, 3¼ x 5″ up to 15 13/16 x 23¼″) . . .

Sufficient impression strength for printing the heaviest forms, and for scoring, creasing, embossing and die-cutting . . . rectangular, round, irregular shapes, greeting cards, photomounts, cartons, book cases, and covers . . .

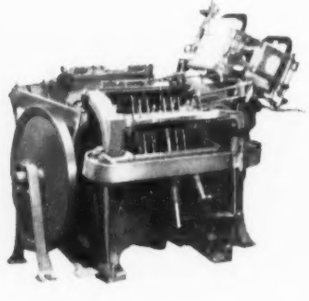
All operating controls (including ink fountain adjustments while press is running) reached from FRONT of press . . .

Printed sheet, form and platen in full view at all times—UP FRONT . . .

Delivery at FRONT, where pressman can easily check ink coverage or numbering machines (also makes slip-sheeting entirely practicable) . . .

Automatic throw-off of press if sheet fails to deliver . . .

These are a few of the features that make Chandler & Price Super Heavy Duty 14½″ x 22″ Craftsman Automatics superior products for specialty printing. Write for complete specifications.



Available Without Inking Mechanism

If used only for cutting, creasing, scoring and die-cutting, these presses can be furnished without inking mechanism.

THE CHANDLER & PRICE COMPANY
Cleveland 13, Ohio

★ *Built by American Workmen* ★

PRINTING EQUIPMENT *Engineer*

AN INDUSTRY-WIDE TECHNICAL PUBLICATION

Published especially for management, production and mechanical executives responsible for printing production and the specification of equipment and supplies used in the commercial, magazine, private plant and daily newspaper fields.

Volume 82 **Number 5**

PRINTING EQUIPMENT Engineer, Published monthly at 1276 West Third St., Cleveland 13, Ohio, Copyright 1952 by Willsea Publishing Co.

EDITORIAL STAFF

MacD. SINCLAIR, Editor

ADAM HENRY REISER
Associate Editor

EDWARD H. OWEN
Assistant Editor

BUSINESS STAFF

DON WILL, Publisher

William L. Osborn, Eastern Manager, 1712 Grand Central Terminal, New York 17, N. Y. Phone: MUrray Hill 6-5980.

Melburn O. Simmons, Mid-West Manager, 333 North Michigan Ave., Chicago 11, Ill. Phone: DEarborn 2-6467.

Subscription price per year, $3.50 in advance in U.S.A. Single copy current issues, 35c; feature issue $1 per copy; December Equipment and Supplies Catalog Issue $2 per copy in United States, $3.50 outside of United States. (U. S. currency). Subscriptions in foreign countries $4.50 (U. S. currency) in advance. Canadian printing plant mechanical and production executives receiving Printing Equipment Engineer under CCA regulations will be charged $1 postage per year in advance to cover additional postage to Canada.

Member Circulation CCA Controlled Audit

Acceptance under section 34.64 P. L. and R., authorized.

Printed in U. S. A.

LEADING ARTICLES

for February 1952

Combination Newspaper-Commercial Plant . . . 25

Printing Week Observances . . . 27

Narrower Rolls and TTS Wire Service Dominate Great Lakes Discussion . 28
- Most Print Direct from Plastic Cuts, 28
- Great Lakes Opening Session, 29
- Mechanical Executive Training, 29
- Advocates Column Width Reduction, 29
- TTS Wire Service Plant Operation, 30
- Machinists Delve Into Maintenance, 32
- Pressmen Consider Problems, 34
- Collect vs. Straight Runs, 34
- Effect of High Shrinkage Mat on Halftone, 35
- Newspaper Color Photoengraving, 36
- Mailing Room Mechanization, 72

Metal Pans, Lead Footings Under Presses . . . 37

Equipment and Supplies . . . 38
- Dust Collector, 38
- Press Operation Booklet, 38
- Photographic Film Base, 38
- Improved Dutro ColorVerter, 38
- Acid Safety Goggle, 39
- Press Control Instrument, 39
- Acquires Trade Marks, 39
- Vibration Felt Bulletin, 39
- Printing Press Reels, 39
- Doyle Infrared Proof Dryer, 39
- Exposure Frame Unit, 40
- Linotype Corona Booklet, 40
- Offset Plate Desensitizer, 40
- Ad-Art Book No. 1, 40
- Sterling Toggle System, 40
- Hand Lift Trucks, 40
- Conversion Ruler, 40
- Two New Models of Densitometers, 41
- Trucks Work in Pairs, 42
- Photocopying Machine, 42
- Electrical Safety Rules, 42
- Fast Setting Cement, 42
- Offers Plastic Engravings, 42
- Ink Specimen Book, 42

The ABC of Offset — Series Two Chapter II . . . 43
GEORGE JOS. LENZER

Increased Production — Improved Quality . . . 45
EUGENE H. SALMON

Nip Books — Not Fingers . . . 46
LILLIAN STEMP

Books . . . 47
- Books and Printing, 47
- Offset Duplicator Techniques, 48

Preserves Documents and Manuscripts . . . 49
M. S. KANTROWITZ

NPA Printing and Publishing Div . . . 50

Recent Equipment Reports . . . 51

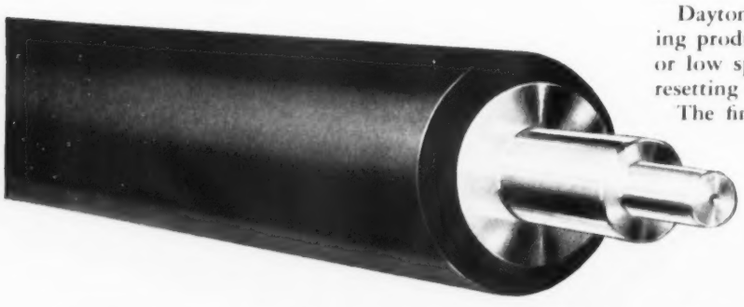
Patents For the Graphic Arts . . . 54

Executive Paragraphs . . . 59

Conference Dates . . . 66

DAYCO Newspaper Rollers build color revenues!

Daily newspapers earn the color premium, increase advertising revenues, with Dayco Newspaper Rollers. They produce high-speed color printing as it *should* be . . . in live, sharp, true colors that advertisers *want* and will *pay* for!



Dayco Rollers handle black-and-white, *or any color,* at top speeds . . . *up to 50,000 impressions per hour!* And they'll stand the great heat build-ups encountered with the fastest presses. This rugged strength assures extremely long-lived service.

Dayton's exclusive processes of compounding and grinding produce amazingly precise diameters, eliminating high or low spots. And accurate diameter is retained, reducing resetting to a minimum.

The finished surface of a Dayco Roller is ultrasmooth, mirror-like . . resulting in clean impressions, with clear type, sharp dots in finely shaded half tones, and unusually strong solids.

Write today for proof that Dayco Newspaper Rollers will solve your color-printing problems . . . *and increase your profits!*

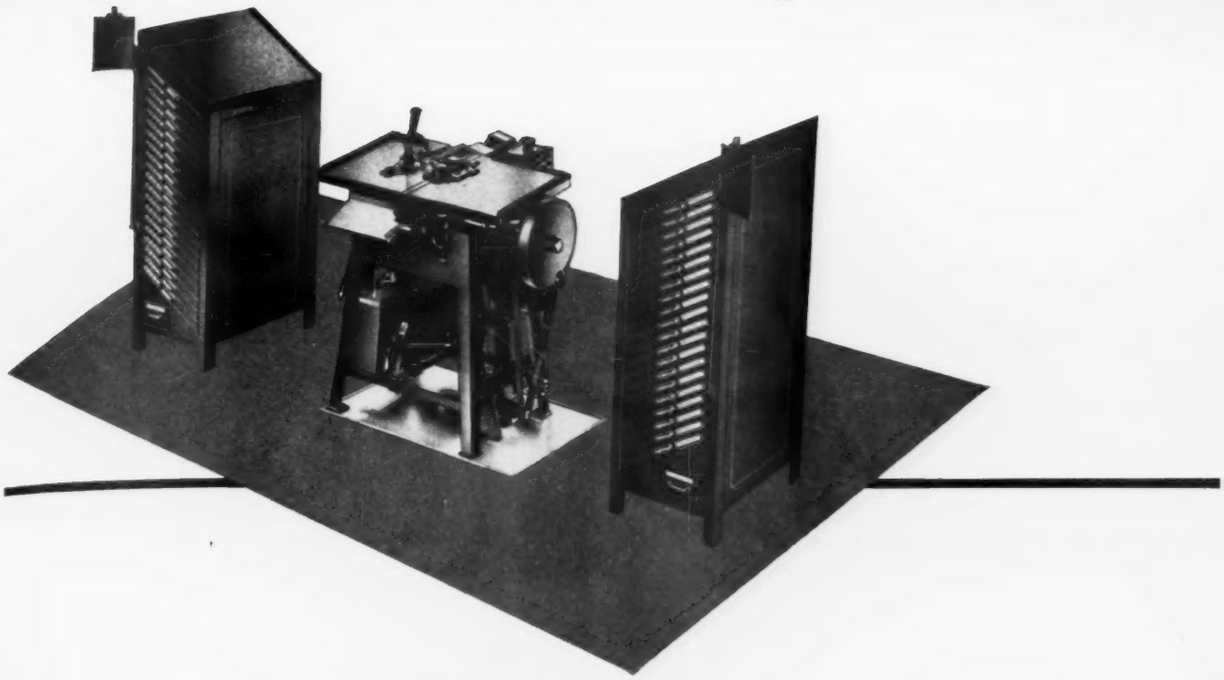
Dayton Rubber

Since 1905

DAYTON RUBBER COMPANY, DAYTON 1, OHIO

Pioneers of Improvements for Better Printing . . .

Dayco Rollers, Blankets, Color Separators, Fountain Dividers . . . for Newspapers, Letterpress, Offset



Ludlow...

Dependability

Ludlow simplicity in both mechanism and operation results in equipment of utmost dependability and efficiency. Given reasonable care regularly, the Ludlow will keep on producing slug-cast display and job composition for all daily requirements.

Such durability and such comparative freedom from mechanical trouble are not accidental, but are inherent in Ludlow design and in the application of both experience and engineering knowledge to assure continuous and satisfactory production.

The Ludlow System is so simple in operation that any competent compositor readily learns to produce composition rapidly and efficiently without extended training. Many short-cuts and simplified practice mean high efficiency under all conditions.

The satisfactory experience of users through the years, as well as the modernization of equipment or the purchase of additional machines and typefaces from time to time, are the best kind of evidence that the Ludlow always can be depended upon.

ELROD

for dependability in the production of leads, slugs, rule and base material

Ludlow Typograph Company 2032 Clybourn Avenue, Chicago 14

Set in members of the Ludlow Tempo family

IPI, Everyday, Gemtone and Holdfast are trademarks of Interchemical Corporation

INTERCHEMICAL CORPORATION • PRINTING INK DIVISION • 67 WEST 44th ST., NEW YORK 18 • ADDRESS DEPT. A

FREE FOLDERS PROVE GEMTONE COLORS BEST FOR A WIDE VARIETY OF PROCESS PRINTING

IPI HOLDFAST BLACKS GIVE BLACKER BLACKS WITHOUT BRONZING OR GLOSS

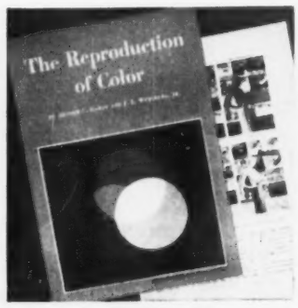
The new series IPI Holdfast halftone blacks are made by improved methods and with new materials which produce the most wanted printing properties. Their finer pigment dispersion gives them a blacker black without undesirable bronzing, more finish without unwanted gloss.

These new blacks also set up faster in the pile for safer load handling right after printing. Their rub and scratch resistance develops more quickly and color transfer is greatly reduced.

Get free press sheets run with new IPI Holdfast blacks. See how they make tough jobs easier to print. Ask your IPI salesman or write us.

COLOR REPRODUCTION THEORY & NEW METHODS ARE TEXT OF FREE BOOKLET

For a brief, non-technical explanation of the theory of color reproduction, get your free copy of "The Reproduction of Color." This unusual booklet is easy to read and liberally sprinkled with color plates. It was published by the Research Laboratories of Interchemical Corporation, parent company of IPI. Authors are Arthur C. Hardy and F. L. Wurzburg, Jr.



Commercial Work Shows How Colors Sparkle, Dots Stay Sharp & Highlights Bright

Want positive proof that your process printing will have more life, snap and sparkle with Gemtone inks? Then see the new IPI Gemtone Folder—free to printers. It's full of top-notch process work printed with Gemtone by ten typical shops across the country.

Colors sparkle, dots are sharp and highlights brighter in these representative commercial runs. That's because Gemtone inks dry fast on top of the sheet to end dryback. And they dry fast without heat on sheet-fed presses to save hours between press runs.

Inks Trap Beautifully; End Crystallization

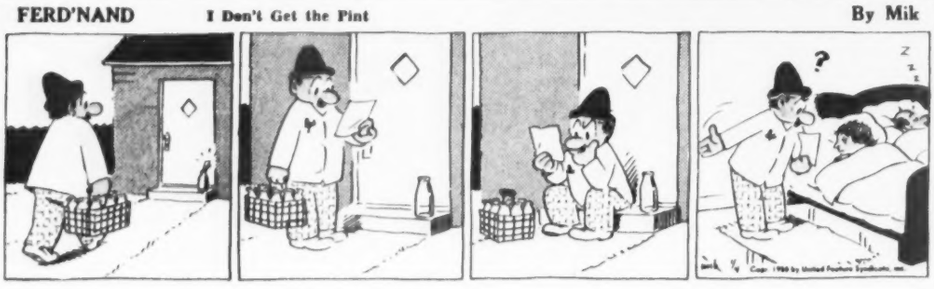
Printers report that Gemtone inks just won't crystallize—stay open for months. One printer ran two colors six months after the first two, and inks trapped beautifully. Colors run last were originally first down, yet Gemtone still gave that "premium finish."

Gemtone Inks Versatile; Used in Many Fields

Gemtone inks were originally developed for process work, but they also give excellent results in other fields. Printers now use them for folding boxes, labels, match folders and even corrugated stock. Gemtone gives them better quality printing plus extra mileage since little ink is lost in penetration.

Ask your IPI salesman for your Gemtone folder today or write to IPI, 67 West 44th Street, New York 18, N.Y.

FERD'NAND **I Don't Get the Pint** **By Mik**



Advertisement

IT'S A MATTER OF SKILL

Every move in producing a newspaper calls for skill. Every cog in every machine must function correctly because mechanical defects can slow up production to a point where they checkmate delivery schedules.

The mechanical excellence of WOOD pressroom and stereotype equipment has long been established. The skill employed in their manufacture is well known and is reflected by freedom from mechanical breakdown and swift, dependable performance every day of the year under the heaviest publication schedules of leading newspapers everywhere.

Every piece of WOOD equipment is designed to perform a specific purpose. It's the kind of equipment that enables the skilled craftsmen who operate it to produce America's best-looking newspapers.

•

SEND FOR NEW LITERATURE DESCRIBING WOOD PRESSROOM AND STEREOTYPE EQUIPMENT

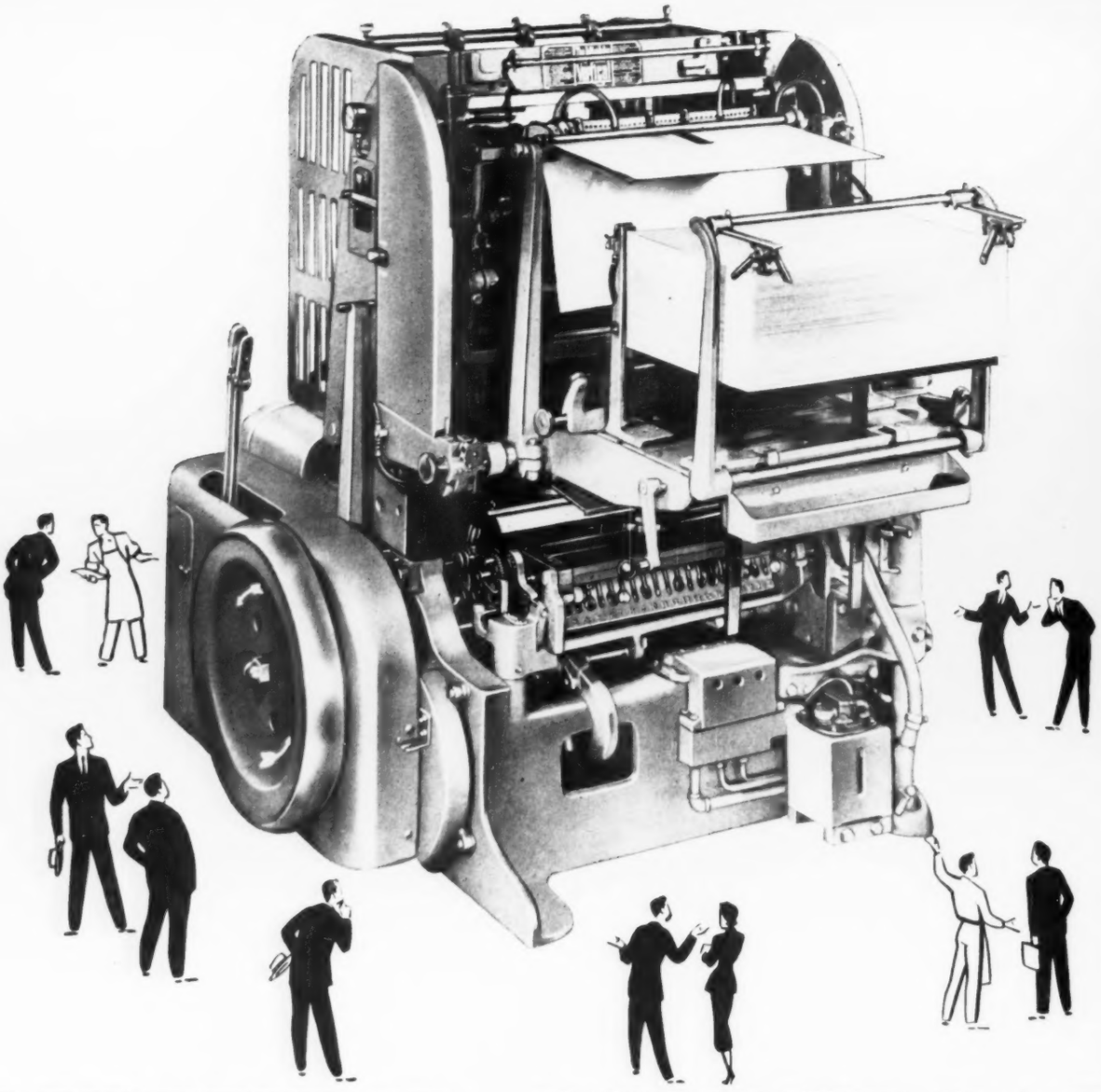
SOME PROMINENT NEWSPAPERS USING WOOD PRESSES AND PRESSROOM EQUIPMENT

- New York Times
- St. Louis Post-Dispatch
- Cincinnati Times-Star
- St. Paul Pioneer Press
- Indianapolis Star and News
- Philadelphia Bulletin
- Philadelphia Inquirer
- Boston Record
- Providence Journal Company
- Hartford Courant
- Newsday—Long Island
- Daytona Beach News-Journal
- Hilltop Record (Columbus, Ohio)

Wood IT'S GOOD

WOOD NEWSPAPER MACHINERY CORPORATION

PLAINFIELD, NEW JERSEY • SALES OFFICE: 501 FIFTH AVENUE, NEW YORK 17



MIEHLE V-50 VERTICAL

the big money-maker for every plant

Regardless of what size plant you operate, the Miehle V-50 Vertical will handle the vast majority of your jobs efficiently and economically. Rapid wash-up, quick changeover, simple and convenient make-ready are some of the features that make this press the big money-maker for every plant. *Sheet size 14" x 20". Speeds up to 5000 per hour.* Find out how easy and profitable it is to operate a Vertical in your plant.

Write today for booklet LV-50

MIEHLE PRINTING PRESS & MANUFACTURING COMPANY

Chicago 8, Illinois

Can Any Publisher Afford an Obsolete Composing Room?

SCOTT Ideal Matrix Rolling Machines

The Scott Ideal Matrix Moulding Machine rolls any kind of matrix. The form is started under the upper cylinder by the application of a crossed belt drive which permits the cylinder to vary its surface speed between 1″ and 1¼″ without slippage. This drive allows the upper cylinder to find its own float without strain on the matrix. Powerful rolling mill effect and straight line pressure assures easy operation.

With the Scott free moulding cylinders all imperfections are eliminated, thus producing sharp, full depth rolled mats free from mechanical buckling.

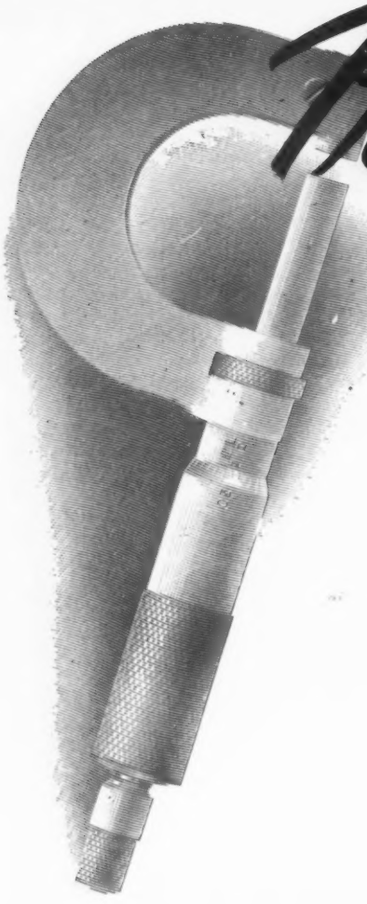
Your inquiry regarding these Scott Ideal Matrix Machines is invited.

Buy with Confidence . . . Buy **SCOTT**

15-L-15

WALTER SCOTT & CO. INC.

PLAINFIELD, NEW JERSEY



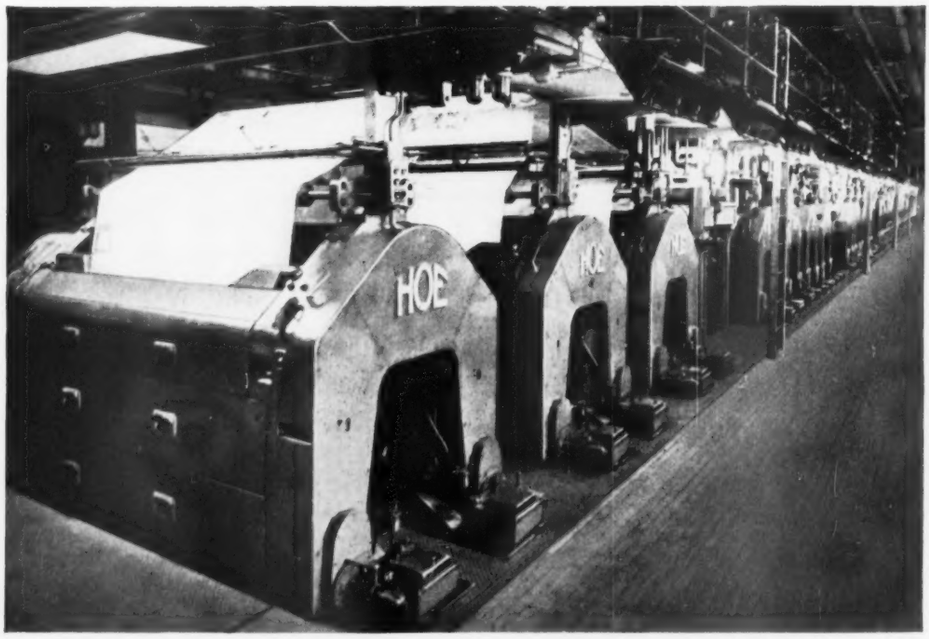
Precision-built for precision performance

Because of its precision design and construction the HOE COLOR-CONVERTIBLE NEWSPAPER PRESS always can be relied upon for top-quality production.

Every part is precision-made from the finest quality of material for the purpose. This, plus anti-friction bearings throughout and force-feed lubrication within oil-tight housings, provides maximum resistance to wear and reduces maintenance. Cylinders and rollers are perfectly balanced statically and dynamically and exact alignment of all elements is scientifically achieved, thus assuring utmost smoothness of performance.

With such construction — plus conveniently located controls for maximum accuracy in adjustment and ease of operation — the Hoe Color-Convertible Press gives the precision performance necessary to meet today's most exacting production requirements.

HOE BUILDS THE BEST



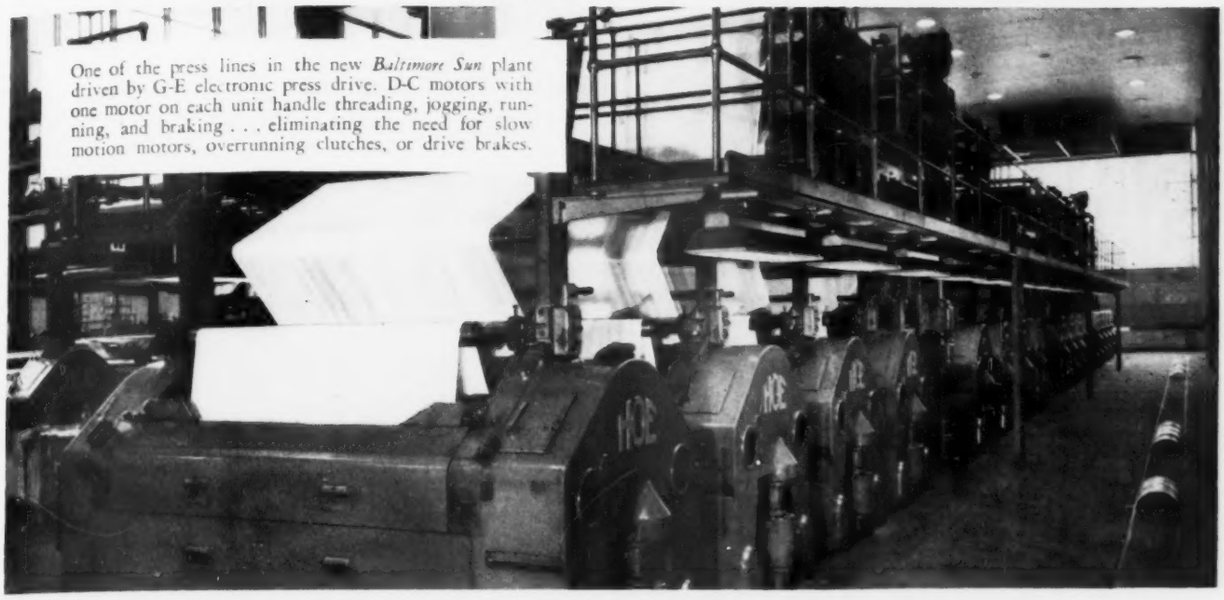
PHILADELPHIA INQUIRER

R. HOE & CO., INC.

910 East 138th Street • New York 54, N. Y.

BRANCHES: BOSTON • CHICAGO • SAN FRANCISCO • BIRMINGHAM • PORTLAND, ORE.

G-E ELECTRONIC PRESS DRIVE SAVES $30,000 INSTALLED



One of the press lines in the new *Baltimore Sun* plant driven by G-E electronic press drive. D-C motors with one motor on each unit handle threading, jogging, running, and braking . . . eliminating the need for slow motion motors, overrunning clutches, or drive brakes.

Incoming power at 13.8 kv is brought directly to this control room near the *Sun* presses. Power is stepped down in compact, metal enclosed G-E load-center unit substations to 460 volts and converted electronically from a-c to d-c to operate the drive.

For handling other electric requirements at the *Sun*, this G-E double-ended load-center unit substation performs the same function of stepping down incoming high voltage power to utilization levels near the areas of heaviest load.

Comparative Study of Installed Costs Shows Electronic System Most Economical

A savings of about $30,000 installed cost by putting in G-E electronic press drive rather than comparable two-motor A-C drives in the new *Sun* plant was indicated by a comparative study made by consulting engineers for the *Baltimore Sun*.

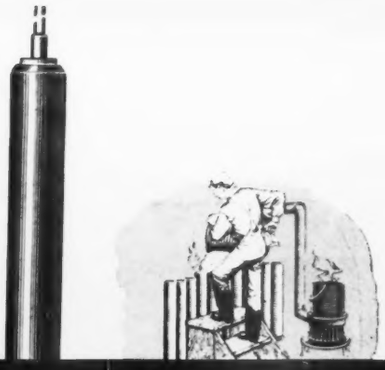
This installed saving, in spite of the somewhat higher first cost of the equipment itself, is due to considerably less power wiring between motors and control, and the elimination of the need for extra ventilating and air conditioning equipment. This is because there are no secondary resistors in the electronic drive to throw off heat.

Modern all the way, the new *Sun* plant is also utilizing the load-center power distribution system with G-E unit substations on the basis of further studies which showed this to be the most effective and lowest cost method of supplying power for plant and printing equipment. Locating unit substations close to centers of load areas also gives less voltage drop and lower power losses for more efficient operation. Hazard to equipment and personnel is also reduced.

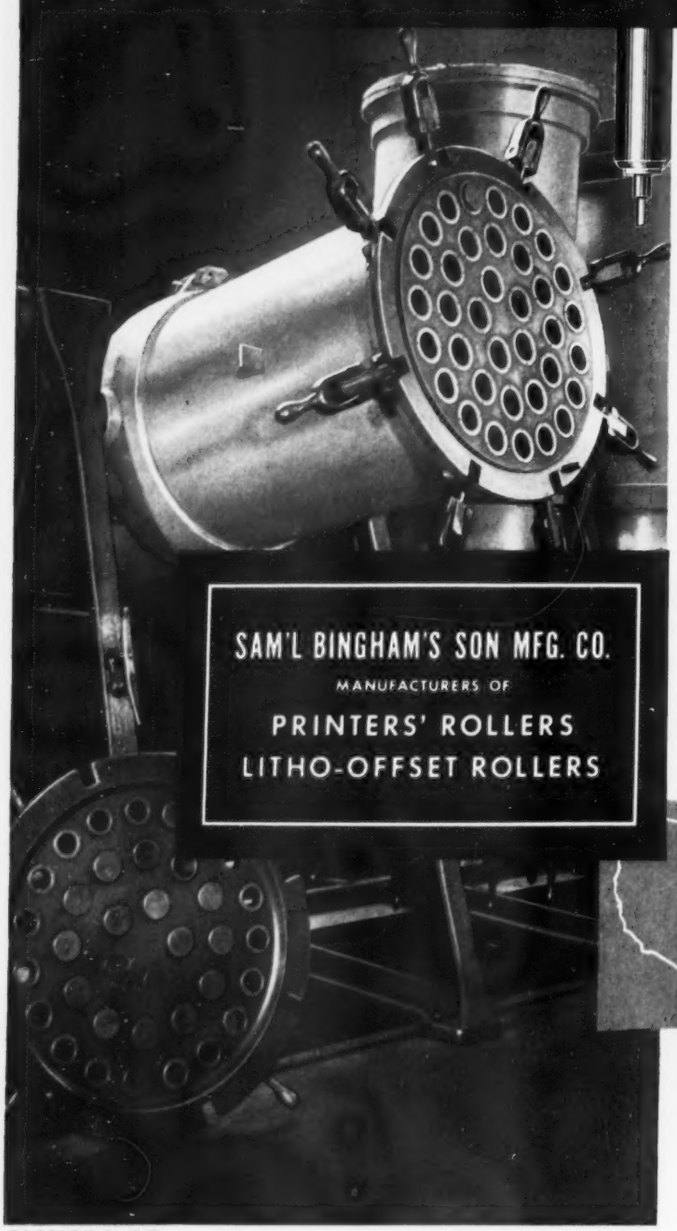
INVESTIGATE TODAY this outstanding press drive and power distribution system. Contact your nearest G-E sales representative or write for bulletins GEA-5523, "New G-E Electronic Printing Press Drive," and GEA-3592D, "Load-Center Unit Substations." *Section 653-18, General Electric Co., Schenectady 5, N. Y.*

GENERAL ELECTRIC

leadership
is our
heritage



SAM'L BINGHAM'S SON MFG. CO.



daily serves printers in 31 states

With 19 modern factories making rollers for use today on today's presses . . .

And over 5 generations of top-flight service to the printing industry . . .

Our reward is the faith of thousands of American printers who swear by Sam'l Bingham's Son Mfg. Co. rollers and our ability to deliver "The Right Roller—Right Away!"

WE ARE NOW MAKING

COMPOSITION ROLLERS FOR

WINTER USE

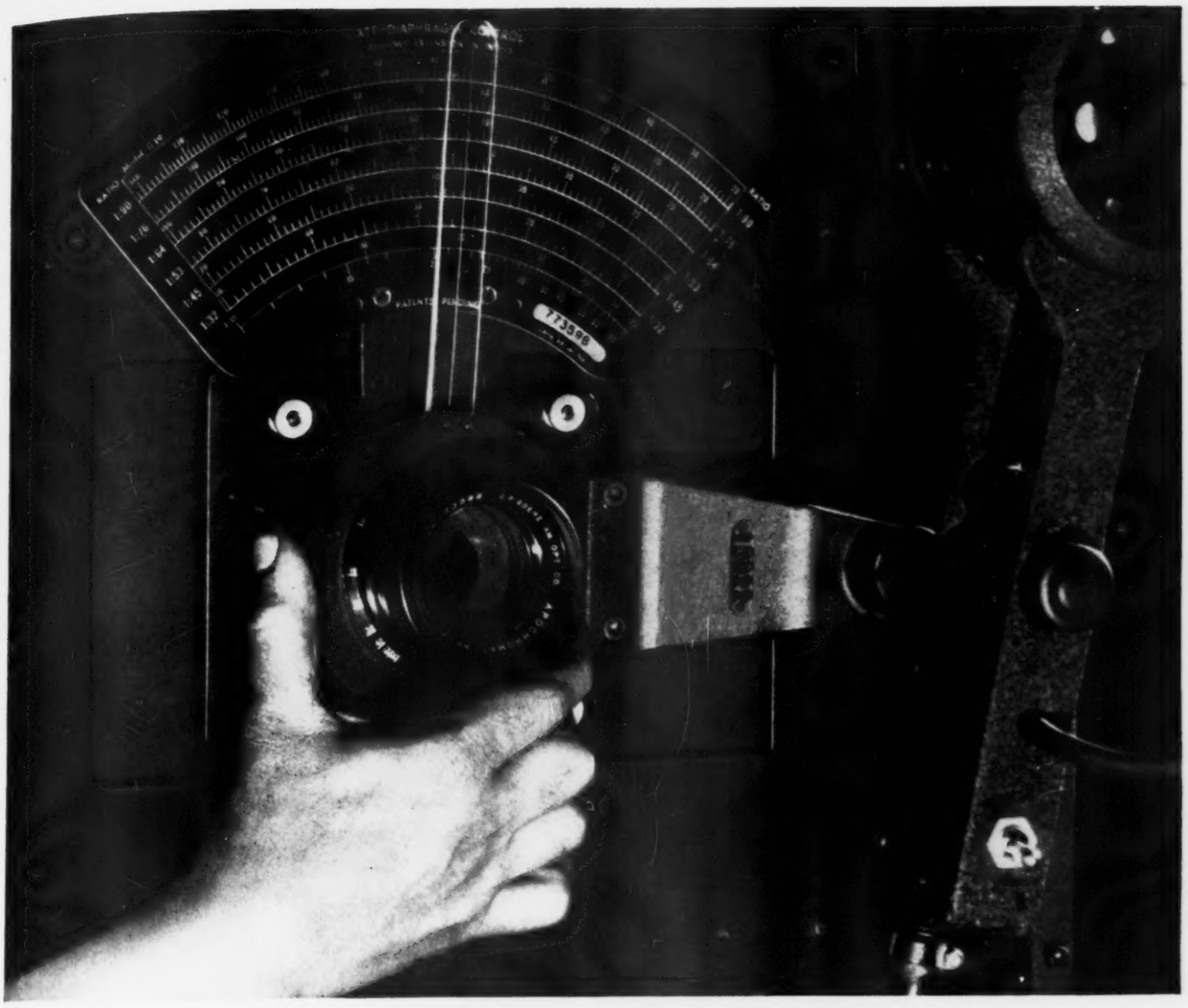
SHIP YOUR OLD ROLLERS TO THE

FACTORY MOST CONVENIENT TO YOU

Atlanta
Chicago
Cincinnati
Cleveland
Dallas
Des Moines
Detroit
Houston
Indianapolis
Kalamazoo
Kansas City
Minneapolis
Nashville
Oklahoma City
Pittsburgh
St. Louis
St. Paul
Springfield, O.
Tampa, Fla.

Let us serve you too! There's a factory near you.

MAKERS OF RUBBER • NON-MELTABLE • FABRIC-COVERED • ROTOGRAVURE • OFFSET • COMPOSITION • VARNISH-LACQUER • GRAINING **ROLLERS**



How to set your f stop for

LIGHTNING-LIKE ACCURACY

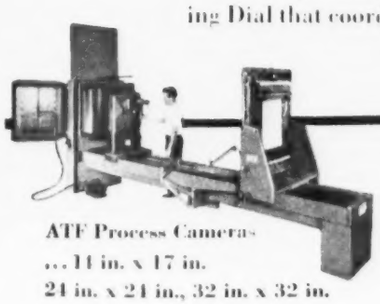
Just make sure your *f* stop is set on an ATF Process Camera.

You set the miracle ATF Diaphragm Control and your calculating is done for you. With lightning-like speed, it correlates lens apertures for any bellows extension.

Accuracy is further assured by a Focusing Dial that coordinates copy preparation and camera operation, and by adjustable precision-calibrated Focusing Tapes readable at darkroom or gallery positions.

Contact ATF for full details on how you can produce quality negatives fast with ATF Process Cameras.

AMERICAN TYPE FOUNDERS, 200 Elmora Avenue, Elizabeth B, New Jersey.



ATF Process Cameras
... 11 in. x 17 in.
24 in. x 24 in., 32 in. x 32 in.

Type faces shown are: Lydian Bold, Bodoni, Bodoni Bold

ATF

Better, More Profitable Printing from the Widest Line of Processes...

GRAVURE...LETTERPRESS...OFFSET

The Shortest Distance

between

a production order and a bill paid!

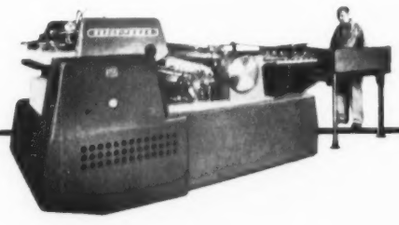
The quicker you deliver a top quality printing job to a satisfied customer, the faster the check comes in. That's where a Kelly Three pays off in fast profits for you.

For sheets come out of a Kelly Three onto the delivery pile at speeds ranging up to 3500 an hour. Rigid frame construction and great impressional strength mean that adjustments and makeready stay put longer.

A Kelly Three is completely accessible, too. It's wide open— you can really get *at* it. Handy controls are centralized within easy reach.

Ask your ATF representative for all the facts and find out why a Kelly Three costs you less to produce every 1000 saleable sheets.

American Type Founders, 200 Elmora Avenue, Elizabeth B, New Jersey.

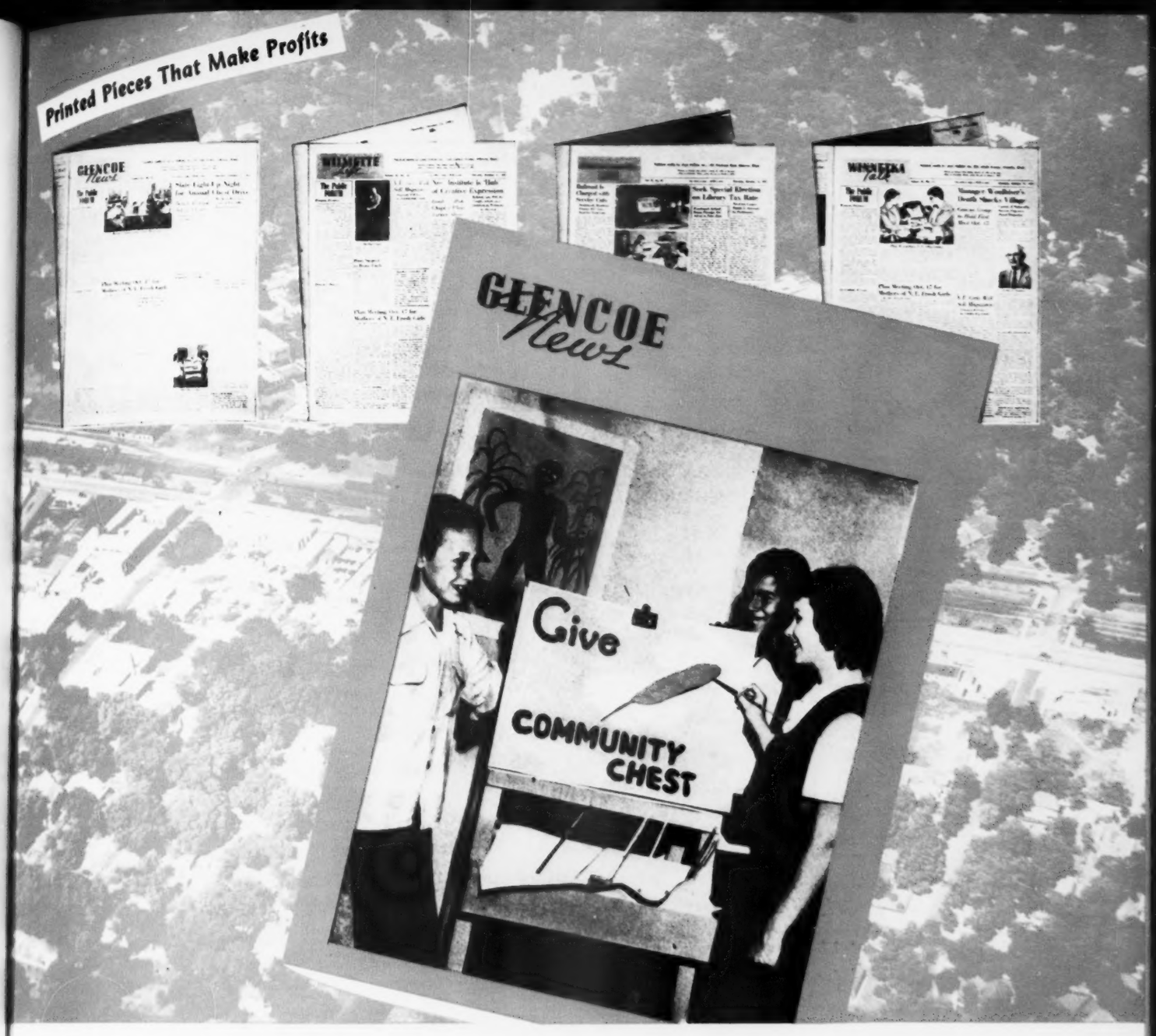


ATF

BETTER, MORE PROFITABLE PRINTING FROM THE WIDEST LINE OF PROCESSES...

GRAVURE...LETTERPRESS...OFFSET

Type faces shown are: Lydian Bold, Bodoni Book



His advertisers love it . . . so do his readers!

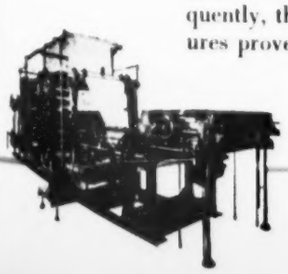
Here's how one publisher cut production time by more than two-thirds, increased paid advertising space, cut composing room time and costs, improved quality for an exclusive readership.

Lloyd Hollister, Inc., publisher of four weekly newspapers with unusual magazine format and a special audience on Chicago's North Shore, accomplished all this by installing an ATF-Webendorfer web-fed offset press designed for the job.

His advertisers are happy with the better, more lifelike reproduction of their ads, with the greater latitude in layout, and with increased sales. Consequently, they're buying more space. Circulation figures prove his readers are happy. The publisher is, too, because of quality, quick pay-out on equipment.

This ATF-Webendorfer was specially engineered to handle a 23½" cutoff and a 38" web width at a speed of 15,000 sections per hour of 16-pages in one color, or 8-pages in two. However, ATF has web-fed presses to cover every type of work—publication, form, web color and specialty web presses. An ATF-Webendorfer also can be made to fold, number, perforate, sheet, collate, with simple attachments.

Information on Lloyd Hollister's Webendorfer press application available from ATF. Ask how you, too, can cut costs, and increase your profits. AMERICAN TYPE FOUNDERS, Webendorfer Division, 2 South Street, Mount Vernon, New York.



Type faces shown are Lydian, Bodoni Book, Spartan.

ATF

Better, More Profitable Printing From The Widest Line Of Processes

GRAVURE . . . LETTERPRESS . . . OFFSET

ONE OF A BATTERY OF SEYBOLD MODEL 4VA CONTINUOUS TRIMMERS AT CROWELL-COLLIER, SPRINGFIELD, OHIO • COLOR PHOTOGRAPH BY CORNELIUS

fine graphic arts equipment . . . for everybody's profi

for the man at the feeder . . . profit

The operator simply places piles of books in the conveyor trough of a Seybold continuous trimmer—from then on, it feeds, clamps, cuts and delivers the fully trimmed books with mechanical precision. Seybold has made this job safer than ever—just one of the ways in which the operator profits.

for the bindery superintendent . . . profit

With nothing complicated to get out of order, maintenance on a Seybold trimmer is minimized. Easy adjustments permit quick changes from one size book to another. Rugged construction and simplicity of action step up the cutting tempo, and the bindery manager profits from a steady flow of finished work at high speed.

for the publisher . . . profit

Like all Harris-Seybold equipment, the continuous trimmer is designed and built for the fast production pace in today's printing and publishing plants. It delivers in volume and on schedule—trims costs as neatly as it trims books. It's the kind of equipment that shows more profit for the owner.

for the man-in-the-street . . . profit

He may not know a continuous trimmer from a pair of scissors, but every consumer has seen a printed piece, a book, or a magazine that came from Harris-Seybold equipment. And the consumer profits from the information and ideas brought to him by the graphic arts.

* * *

Commercial printing profits everyone, and we're proud to be suppliers to the industry: continuous book trimmers, power cutters, paper drills, rotary lithographic presses, rotary letterpresses, litho-chemicals, and other fine graphic arts equipment. Service centers in all principal cities.
Harris-Seybold Company, 4510 East 71st Street, Cleveland 5, Ohio.

HARRIS-SEYBOLD

NEW PACKING TOP SHEET CUTS DOWN-TIME, IMPROVES QUALITY, RETURNS ITS COST IN BIG SAVINGS!

Try **TRAVEL GRIP**

PATENTED and Patents Pending

Tested and proved superior by largest printers and publishers—now available to all printers everywhere!

Travel Grip—a patented, plastic-coated Packing Top Sheet—has remarkable qualities of tremendous importance to printers. Important in *quality*. Important in *top press* performance. Important in *profits!*

Travel Grip is superior in 17 ways—all of which we will be pleased to describe. Basically, however, the superiorities boil down to these three big points:

1 In carefully controlled tests TRAVEL GRIP cut down-time for top sheet changes by lasting 5 to 10 times as long as ordinary top sheet!

2 Surface quality and resiliency of TRAVEL GRIP make it easier to achieve finest work regardless of your type of equipment!

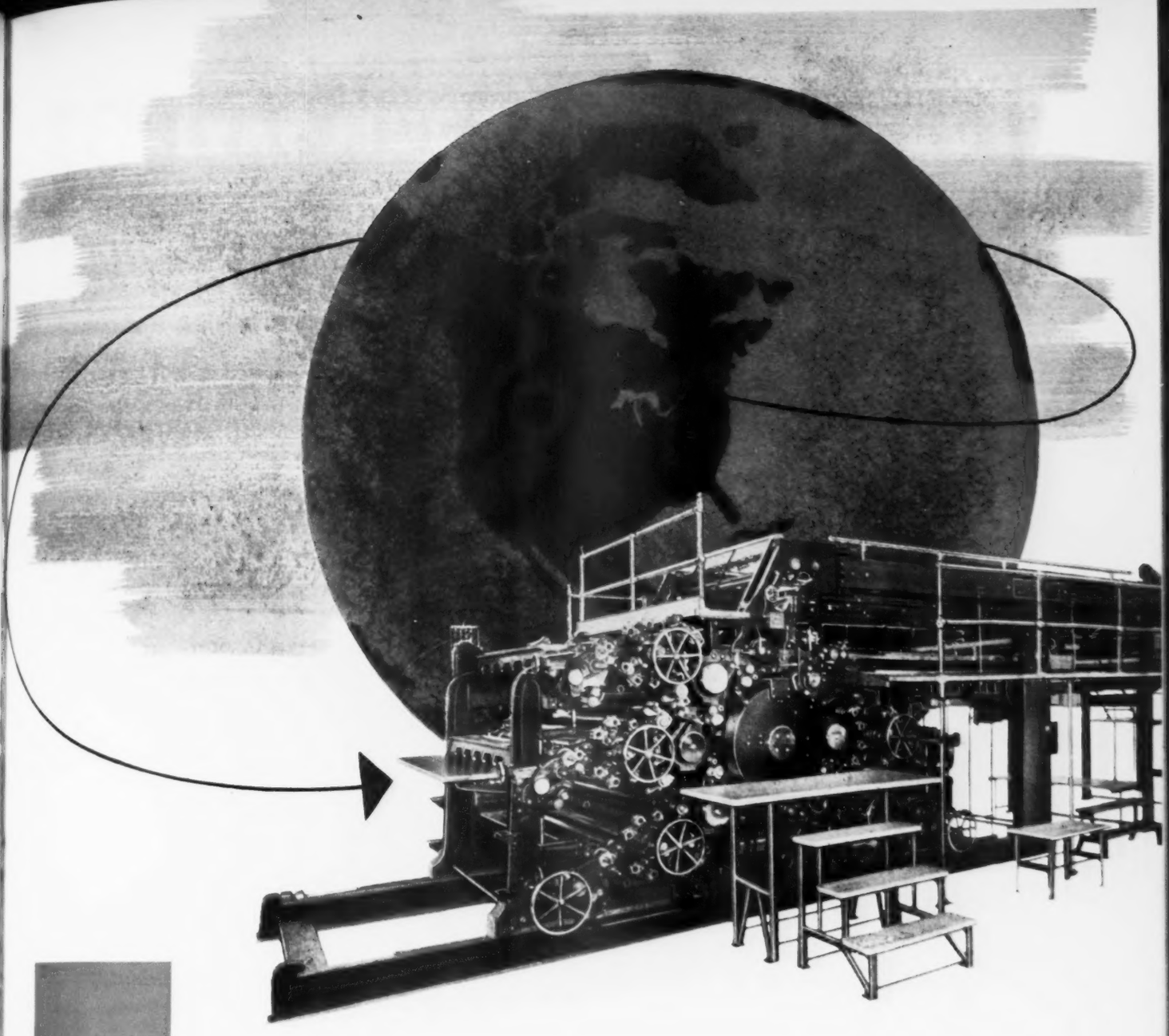
3 When used as recommended TRAVEL GRIP pays for itself in substantial savings!

If these benefits interest you—and surely they must!—contact your paper merchant or printing supply jobber, or write us for more information. It is not a day too soon to enjoy the benefits of this truly remarkable Packing Top Sheet.

the Miami Valley Coated Paper Company

FRANKLIN, OHIO

LICENSED BY BISHOP-STANSELL AS SOLE MANUFACTURERS OF TRAVEL GRIP



COTTRELL

how do you account for this?

Despite the fact that some printers say,
"I don't have the type of work or length of run for SHEET-FED ROTARY LETTERPRESSES"—

this fact remains...

Of this type alone, Cottrell has sold and installed 181 presses with 702 printing cylinders since World War II.

experience ***does*** *count!*

C. B. COTTRELL & SONS COMPANY

WESTERLY, RHODE ISLAND • *Claybourn Division, Milwaukee, Wis.* • *Sales Offices: New York, Chicago, London*

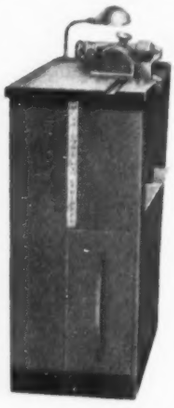
FOR COMPOSING ROOM $AVING$

LOOK into the advantages of
MORRISON *Saw Trimmer and Allied Machines*

MORRISON PLATE BEVELER

Puts a perfect, burr-free shoulder or bevel on all plates. Cutters work from edge of plate, not the top. You get a smooth die-straight cut every time.

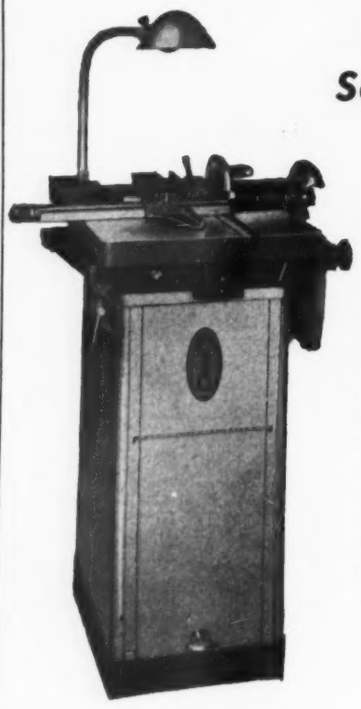
MORRISON SLUG STRIPPER



"Proves itself to the men, within 24 hours." Makes it easy to strip the face of any slug or type character to the exact thickness needed for base heights.

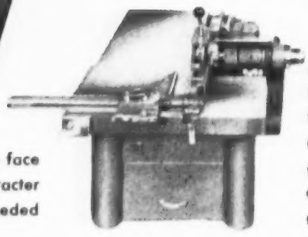
MORRISON

Model 3-A Saw Trimmer



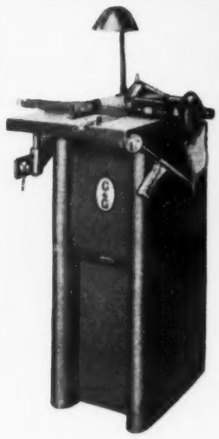
Today's more versatile saw, Table, 30" x 18". DeLuxe equipment includes: 73-Pica gauge and workholder. 135-Pica extension gauge, miter and lineup gauge, right and left-hand miter vise, saw grinder with dished emery wheel, trimmer grinder, universal saw blade assembly with head and trimmers. No. 20 waste receptacle, adjustable lighting fixture, motor and pulley.

MORRISON MODEL "45" SPECIAL



A low-cost saw trimmer that embodies most of the features of the higher priced Model "45" and Model 3-A. "Behind the gauge" work clamp is standard, conventional "ahead of the gauge" clamp is optional equipment. Also available in a cabinet model.

MORRISON MODEL 45 SAW TRIMMER



With pistol grip saw blade attachment. Features "Trigger Speed" saw adjustment.

MORRISON ROUTER AND TYPE HIGH PLANER

Saves time in making corrections and changes, saves make ready time by having all cuts precision height. Has exclusive Morrison micrometer height gauge. Allows routing to center of a 34" cut.

Other Morrison Equipment includes: Strip material cabinets, waste receptacles, Universal saw blades, router bits, and jig saw blades

Symbol of Operating Economy

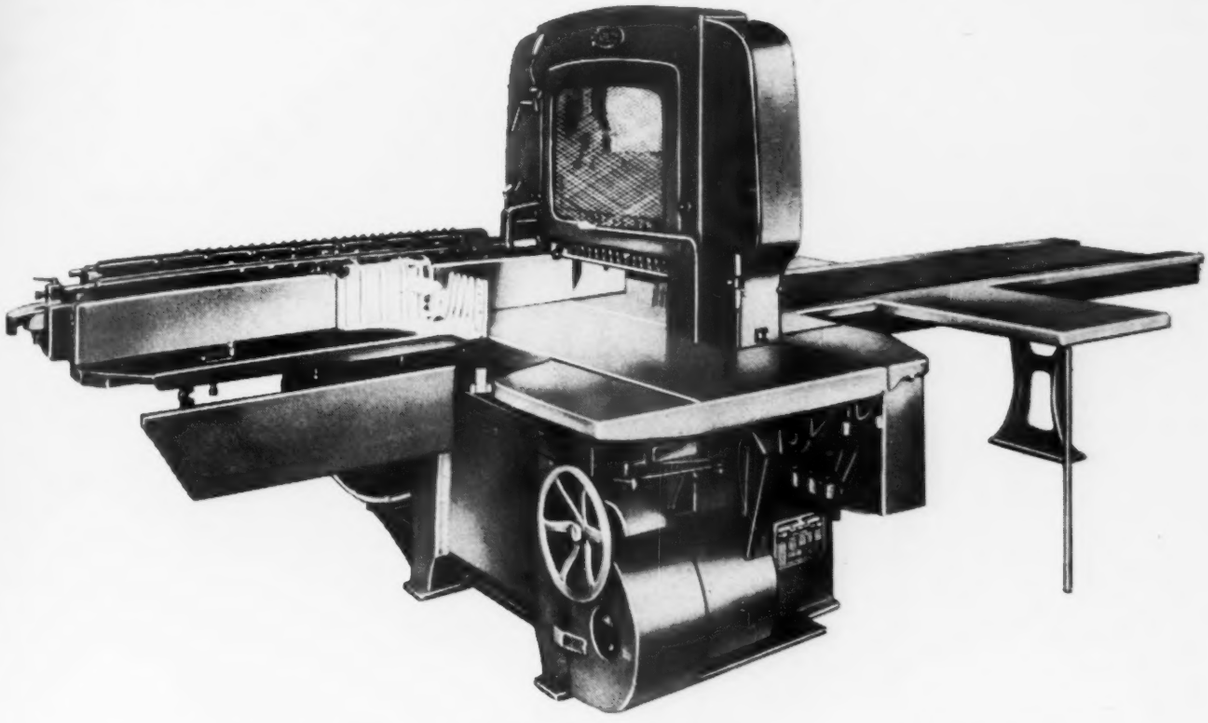
THE MORRISON COMPANY MILWAUKEE WIS.

THE *Morrison* COMPANY

PRECISION MACHINES FOR THE GRAPHIC ARTS INDUSTRY

125 W. Melvina Street, Milwaukee 12, Wisconsin

The Brackett Straight Line Safety Trimmer



eliminates waste motion and unnecessary rehandling

...and assures unqualified accuracy

On the Brackett Trimmer work moves in a straight line — away from the operator — without waste motion or needless rehandling. Work and trimmings are conveyed to rear of machine, where tables are provided for wrapping or other ultimate handling, and receptacle takes care of trimmings. Conveyor speed may be adjusted to suit the particular job on the machine.

Mechanical setting of spacer shafts insures that same fine degree of accuracy required in cutting punch cards, where even the tiniest variation would make the cards useless. This kind of setting insures absolute precision from first cut to last, whether the job runs a thousand or several million.

For recurring jobs, preset gauges may be retained. No need of resetting means preparation time saved when job is repeated.

The Brackett Trimmer handles booklets, covers, inserts, circulars, labels and other flat work, at double or triple the speed of the conventional guillotine cutter.

The Brackett takes work up to 25½" in width and up to 50" in length. Two spacer shafts covering ten set-ups are furnished as standard equipment. Extra shafts for permanent set-ups can be supplied.

Equipment includes two knives, six cutting sticks, silent V belt drive, 2 h. p. motor. Solenoid safety switch is operated from light current.

Clamping is powered by oil pressure, adjustable between 1,000 and 5,000 pounds.

Floor space required for machine with 50" gauge and 9½' conveyor: 7½ x 15½'.

Dexter · Christensen · McCain

Modern Machines for Printers and Binders

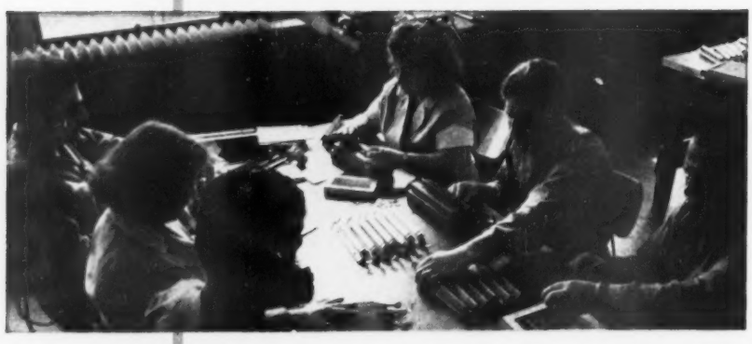
DEXTER FOLDER COMPANY, General Sales Offices 330 W. 42nd St., New York 18, N. Y.

Branch Offices, Domestic and Foreign Agents

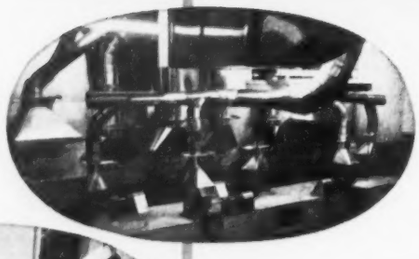
No-Fuss-No-Muss-----

----------WITH----- **MATRIX CONTRAST**

SERVICE



New fonts and sorts shipped from matrix manufacturers are checked against customer's color charts before applying color.

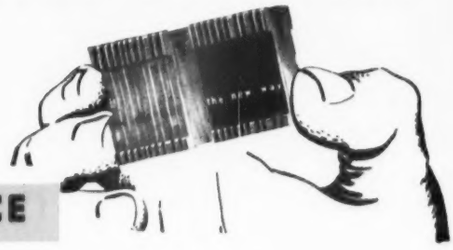


Modern processing rooms in Matrix Contrast plants where matrices are treated before application of colors.

A Matrix Contrast Service Crew operating portable processing equipment in a newspaper plant.

Typical Matrix Contrast Service Truck which some of our 31 crews use to process matrices in your plant . . . day or night.

It has taken over 25 years to perfect Matrix Contrast Service. Now, your matrices are treated by a time-tested process that will not flake off nor gum up your machines. Newspaper publishers everywhere will testify to the economical advantages of the Matrix Contrast Method . . . It's clean, it's proven, it lasts. And, too, there are six service branches and 31 trained service crews ready and equipped to give immediate attention to processing your matrices. When you order Matrix Contrast Service, you can forget about the cleaning and processing of your matrices. Your present matrices are treated in your plant by our well-trained technicians without interrupting your schedules. And, new matrices are delivered several times daily from the matrix manufacturers, located in Brooklyn, to our New York plant, where the reference marks are processed day or night. Our Chicago Service Station also receives deliveries several times daily from the Chicago branch of Matrix Manufacturers and is equipped to operate 24 hours a day.



Copyright 1951, Matrix Contrast Corporation

MATRIX CONTRAST SERVICE

MATRIX CONTRAST CORPORATION

154 West 14th Street, New York 11, N. Y.

326 W. Madison Street, Chicago 6, Ill.

1105 Trenton Street, Los Angeles 15, Calif.

European Agents: Funditor, Ltd., 3 Woodbridge Street, Clerkenwell Green, London, E. C. 1.

PRINTING
EQUIPMENT
Engineer
February 1952

New home of the Pampa (Tex.) *Daily News* houses facilities for both newspaper and commercial printing. Shown above is the 80 ft. front of the tilt-up type building.

Combination Newspaper-Commercial Plant

OPEN house was held recently at the Pampa (Tex.) *Daily News* to inaugurate the opening of its new publishing plant housing both newspaper and commercial printing facilities. To mark the event, a 32 page special section was printed by the *Daily News* to afford its readers information about modern newspaper operation.

The 80 ft. wide by 143½ ft. long building is the first tilt-up concrete slab type of construction in that area.

Physical features of the plant's interior include cinder block partitions, asphalt tile floors and acoustical ceiling in the front offices. The exterior of the building is painted with a specially mixed pinkish-grayish tan to minimize the effects of carbon black smoke and sand in the air.

Publisher of the *Daily News*, Ralph M. Juillard, has nearly 25 years experience in newspaper operation. In overall charge of the mechanical departments is Kendell Green, Mechanical Supt.

In addition to the principle business, editorial and mechanical departments found in most newspapers and located in the accompanying floor plan layout, the building also houses an engraving room, photographic darkroom, Teletypesetter perforator room, heating and air conditioning plant, commercial printing department, ample men's and women's washrooms, and paper storage facilities for both the newspaper and job printing department.

Mechanical Departments

The Composing Room at the *News* is equipped with three ad Linotypes and three news Linotypes, the latter operated by Teletypesetter units. Near these machines is the glass-enclosed Teletypesetter perforator room, accommodating one large desk on which three perforating machines are located.

All Linotype machines in the new plant are vented to carry away fumes from the metal pots. This also reduces the heat and makes the air conditioning of the room more effective. Other equipment located in this department, which is staffed by a crew of 10 men, includes a Ludlow machine with matrix cabinet, Elrod strip caster, Hammond Glider TrimOsaw, Wesel proof press, Amsco vertical mitering machine, Morrison slug stripper, makeup tables and trucks, Goss stereotype mat roller and a Sta-Hi power-lift form file.

The engraving room houses a 65 line screen Electronic Fairchild Scan-a-graver, an important machine to this small daily when late local pictures are desired. Operator of the Fairchild machine is Don Duncan, Photographer and Engraver at the *News*.

Centrally located between the composing room and the pressroom, is the stereotype department. The equipment in this room includes a Royle flat cast router, Plane-O-Plate shaver, Miller stereotype saw, Surface Combustion dross and slug remelt pots, Pony Autoplate, Hoe curved plate router and cage, Sta-Hi Automatic Scorcher, and Hammond flat casting box. William Green is Stereo Foreman at the *Daily News*.

A 63½ T. Goss Sextuple Press was recently installed in the pressroom. The press is designed to turn out up to 28 thousand newspapers of 24 page capacity an hour, or 14 thousand papers per hr.

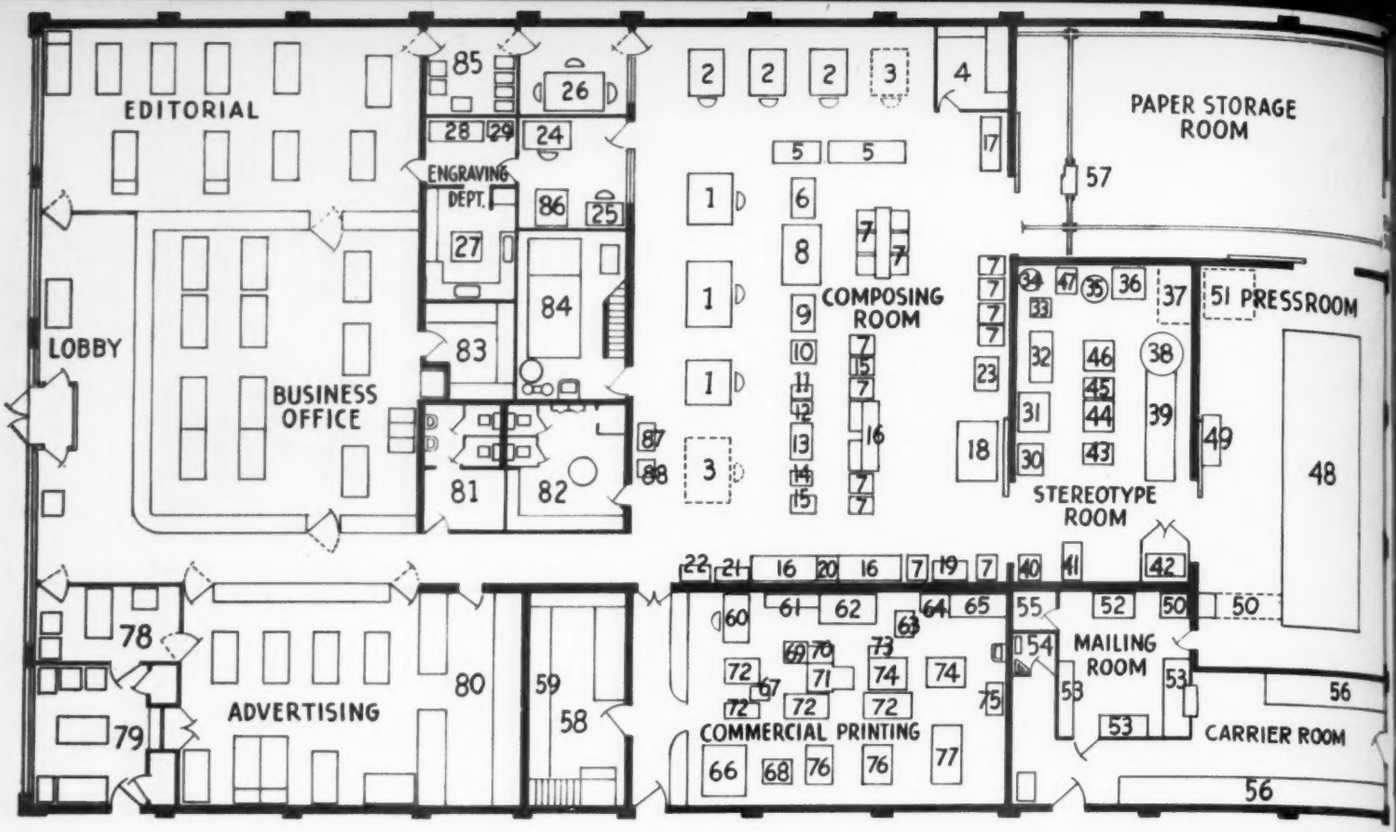
TYPOGRAPHIC QUESTIONS NEEDED

At the 33rd Annual Convention of the Intl. Association of Printing House Craftsmen to be held in St. Louis, August 10-13, 1952, one of the features will be a Typographic Clinic. Howard N. King, Second Vice President of the association, has been selected as the chairman.

The plans call for a panel of experts to be chosen from various sections of the country who will answer questions on type faces, type design, layout, composing room procedures and anything pertaining to the art of typography.

Mr. King wants to make this clinic worthwhile for everyone in the Graphic Arts and is therefore issuing an invitation to printers everywhere to send their questions to him.

Howard N. King may be reached at The Maple Press Co., York, Pa. He promises to provide an answer to everyone who sends one or more questions to him.



Floor Plan Layout of Pampa (Tex.) *Daily News* **Equipped for Both Newspaper and Commercial Printing.**

Composing Room

1.—Ad Linotypes
2.—News Linotypes equipped with Teletypesetters
3.—Future Line-casting Machines
4.—Machinist's Room
5.—News Type Dump and Correction Bank
6.—Wesel Proof Press
7.—Makeup Trucks
8.—Advertising Markup Desk
9.—Ludlow Machine
10.—Ludlox Matrix Cabinet
11.—Ludlow Super Surfacer
12.—Amsco Vertical Mitering Machine
13.—Border Material Storage Rack
14.—Morrison Slug Stripper
15.—Hammond Glider TrimOsaw
16.—Ad Makeup Tables
17.—Elrod Material Maker
18.—Goss Mat Roller
19.—Sta-Hi Power-Lift Form File
20.—Signature Cut File
21.—Standing Ad File
22.—Type Case
23.—Utility Table
24.—Plant Supt.'s Desk
25.—Proofreader's Desk
26.—Teletypesetter Perforators

Engraving Dept.

27.—Enlarger
28.—Fairchild Engraver
29.—Utility Table

Stereotype Dept.

30.—Flat Cast Table
31.—Royle Flat Cast Router
32.—Plane-O-Plate Shaver
33.—Miller Stereotype Saw
34.—Dross Remelt Pot
35.—Surface Combustion Slug Remelt Pot
36.—Dead Slug Dump
37.—Surplus Curved Plate Storage
38.—Hoe Stereotype Metal Pot
39.—Pony Autoplate
40.—Mat Trimming Table
41.—Mat Packing Table
42.—Hoe Curved Plate Router and Cage
43.—Flat Cast Table
44.—Sta-Hi Automatic Scorcher
45.—Simplex Scorcher
46.—Hammond Flat Casting Box
47.—Pig Mold Stand

Pressroom

48.—Goss Sextuple Press
49.—Pressman's Work Bench
50.—Under-the-floor Conveyor
51.—Cutler-Hammer Control Panel in Balcony

Mailing Room

52.—Mailing Counter
53.—Carrier Route Racks
54.—Carrier's Wash Room
55.—Circulation Supply Storage
56.—Folding Counter

Paper Storage Room

57.—Electric Paper Hoist

Commercial Printing Dept.

58.—Paper Storage
59.—Shelves
60.—Foreman's Desk
61.—Standing Form File
62.—Type Cabinet and Makeup
63.—Hammond TrimOsaw
64.—Type Case
65.—Type Cases and Spacing Material Storage
66.—Diamond Power Paper Cutter
67.—Boston Power Stitcher
68.—Challenge Power Drill
69.—Southworth Hand Perforator
70.—Honig Multiple Broaching Machine and Cabinet
71.—Nygren-Dahly Rotary Perforator
72.—Work Tables
73.—Reglet Table
74.—Makeup Tables
75.—Letter Broad Drying Rack
76.—Chandler & Price Platen Presses
77.—Kelly Automatic Cylinder Press

Miscellaneous

78.—Reception Room
79.—Publisher's Office
80.—Advertising Mat Work Room
81.—Women's Wash Room
82.—Men's Wash Room
83.—Record Vault
84.—Heating and Air Conditioning Plant
85.—Morgue
86.—Employee's Coffee Bar
87.—Soft Drink Dispenser
88.—Drinking Fountain

containing 48 pages. The 19 ft. high by 29 ft. long press is powered by a 75 h.p. motor and controlled by a Cutler-Hammer control panel situated on a balcony above the press floor. Pressroom Foreman is John Andersen.

An under-the-floor conveyor carries the printed papers from the press into the mailing room. The location of the plant affords access to a railroad siding for bringing in newsprint rolls from the cars. These are handled by an electric paper hoist in the paper storage room which is connected to pressroom.

Commercial Department

The commercial printing department, managed by E. A. Dixon, occupies 1125 sq. ft. of floor space in the new building, with 500 sq. ft. of floor space set aside for storing paper stock. All kinds of business and social stationery, office forms, checks, booklets and cards are produced in this department. Recent equipment additions include a power perforator, Honig multiple-broaching machine and a Hammond TrimOsaw. Two Chandler & Price platen presses and an ATF Kelly automatic cylinder press comprise the department's press equipment.

Open House for Suppliers

Wetzel Brothers, creative printers and lithographers, Milwaukee, Wis., recently held Open House for the company's suppliers in that area. This occasion marked the completion of the installation and operation of new Miehle No. 61 four color and Miehle No. 61 two color presses as well as a number of other additions of equipment in the bindery.

Printing Week Observances

THE 246th anniversary of Benjamin Franklin's birth was celebrated throughout the country the week of January 13-19 with what is now popularly known as Printing Week, an observance sponsored by the Intl. Assoc. of Printing House Craftsmen, Printing Industry of America and Intl. Graphic Arts Education Assoc. Among the organizations reporting activities in commemoration of the event was the Milwaukee-Racine Craftsmen's Club which held an annual dinner with Col. Elbridge W. Palmer, President, Kingsport Press, Inc., Kingsport, Tenn., as principal speaker. Col. Palmer spoke on the relation between printing and progress.

Assisting the Milwaukee Club with the event were the Milwaukee Litho Club, Milwaukee Advertising Club, Women's Advertising Club, Direct Mail Advertisers Assoc., Graphic Arts Guild, Graphic Arts Assoc. and Graphic Arts Young Executive's Assoc.

In his talk, Col. Palmer said that because its facilities are constantly in demand, the printing industry is one of the last to feel the dire effects of economic depressions and among the first to emerge. Despite the growth of the printing industry following World War II, when 26,000 veterans were absorbed into the training programs, he asserted that even more skilled workers are needed. "To assure a continuous flow of trained mechanics," Palmer added, "the training programs must be expanded."

Another speaker on the program was Arthur A. Wetzel, President of Wetzel Bros., Milwaukee, and President of the Printing Industry of America, Inc. Wetzel advised that printers should imitate their American patron, Benjamin Franklin, in his devotion to public service and social duties.

Thomas P. Mahoney, Plant Mgr. of Regensteiner Corporation, Chicago, and Third Vice Pres. of the Intl. Assoc. of Printing House Craftsmen, also addressed the Milwaukee gathering. Mahoney outlined the objectives of the Craftsmen's organization and explained that publicizing the importance of printing to the national economy was one of its major purposes.

Pittsburgh Speaker

PIA President Wetzel was guest speaker at the Printing Week observance held in Pittsburgh and sponsored by the Printing Industries of Pittsburgh. The title of his address was *Sermon for Printers* which was based on texts from Franklin.

Features Plant Tours

The Printing Industry of Oklahoma City as well as the local Craftsmen's Club and advertising organizations cooperated in the city-wide celebration of 1952 Printing Week. Highlight of the week was the scheduling of four tours through Oklahoma City's printing plants. These included the Norwick Brothers, Oklahoma Paper Co., Times-Journal Publishing Co. and Oklahoma Publishing Co.

In addition to store window displays and a poster contest for art students, a television show was also presented on the *Art of Printing and Its Contributions to Man.* At a joint luncheon between the Printing Industry of Oklahoma City and the Chamber of Commerce, Arthur Wetzel, President of the PIA, spoke on the life of Benjamin Franklin.

Los Angeles' Program

Los Angeles held its most intensive celebration in that city's Printing Week history with participants from the mayor to a movie star joining in the festivities. Among the week long activities were the appearance on a television program of Reaugh Fisher, Coordinator of Printing Apprenticeship for the Los Angeles City Schools and Past President of the Los Angeles Craftsmen's Club, and Phil Ellsworth, President of the Printing Industries Assoc., Inc., of Los Angeles.

Appearance at civic and service organizations included: Wes Scott, Scott & Scott; Dee Gould, Western Lithograph Co.; Gordon Holmquist, First Vice Pres., Intl. Assoc. of Printing House Craftsmen; G. Henry Henneberg, Manager of Los Angeles PIA; Dale Magor, Jeffries Banknote Co.; Richard Bovard, Assistant Mgr. of Los Angeles PIA; and Gordon Matson, President of the Los Angeles Craftsmen's Club. Principal speaker at the Graphic Arts banquet, highlight of the celebration, was John G. Gerken, head of PIA's printing management consultant service in Los Angeles.

Print With Rubber On Paper Side of Foil

If it is necessary to print on the paper side of foil (which is often the case) rubber plates should be used to avoid showthrough of the impression (not the ink) on the foil side which might not be noticeable in regular printing on paper.

New York Participates

A total of 62 Graphic Arts groups cooperated in the observance of Printing Week in New York. Highlight of the week-long program was the Printing Week Dinner at the Biltmore hotel which featured General Walter Bedell Smith, head of the U. S. Central Intelligence, as guest speaker.

Open house was held in printing plants throughout New York and at the New York School of Printing. Exhibitions included the showing of work by the Type Directors Club, presentation of entries in a contest for cover designs sponsored by *Type Talks*, publication of Advertising Typographers Assoc. of America, Inc., and an exhibit of printing for commerce under the auspices of the American Institute of Graphic Arts.

Other activities of the week included a discussion on *Production of Gentry, the New Magazine*, sponsored by the Club of Printing House Craftsmen of New York and The Navigators. A television program, *Tribute to Industry*, portrayed the activities of New York Employing Printers Assoc., Inc., in serving the printing industry of the New York metropolitan area and its customers.

Speakers at the Printing Week dinner sponsored by the Milwaukee-Racine Club of Printing House Craftsmen included (from left to right): Thomas P. Mahoney, Third Vice Pres., Intl. Assoc. of Printing House Craftsmen; Col. Elbridge W. Palmer, President, Kingsport Press, Inc., Kingsport, Tenn.; Arthur A. Wetzel, President, Printing Industry of America, Inc.; and Gilbert R. LaVesser, President, Milwaukee-Racine Craftsmen's Club

PUNGENT PARAGRAPH

(Abstracted from address delivered by Frank Phillips, Teletypesetter Corporation, before Great Lakes Conference, Detroit, January 1952.)

"'There is no room for thoughts and plans for the future in a mind overburdened with memories of the past.'"

Narrower Rolls and TTS Wire Service Dominate Great Lakes Discussion

By STAFF WRITERS

APPROX. 590 mechanical and production executives and manufacturer and supplier representatives attended the Great Lakes Newspaper Mechanical Conference, January 20, 21 and 22. The conference was held at Hotel Statler, Detroit. Consensus of opinion was that this was the best one ever held by newspaper executives in the Great Lakes district. President Joseph E. McMullen and the Detroit Committee on Arrangements headed by Charles Kirk, together with Edgar Flint, Chairman of the Manufacturers' and Suppliers' Committee, were thanked in open conference session. Two topics of high current interest were newsprint roll width reduction and Teletypesetter wire service circuits. These topics were discussed fully with respect to the effect of each upon the different mechanical departments involved.

Chairman of the Non-Metropolitan Newspaper Executives Meeting was Horace H. Parker, Pressroom-Stereotype Supt., Richmond (Ind.) *Palladium Item*. Co-chairmen were Frank Duncan, Pressroom-Stereotype Supt., Portsmouth (O.) *Times*; John McRae, Mechanical Supt., Bowling Green (O.) *Sentinel-Tribune*; and Cecil Watkins, Mechanical Supt., Sidney (O.) *Daily News*.

The subject of *Proper Equipment for Quality Printing on a Small Newspaper* was handled by Co-Chairman McRae who revealed the results of a survey he conducted among 40 smaller newspapers in respect to equipment. A total of 36 papers replied to the questionnaire which the speaker thought was indicative of the prime importance these people have attached to equipment.

Of the newspapers replying, 24 are printed on tubular presses and the remainder on the semi-type presses. Twenty-one of the papers use shell casts and 15 use both shell and type high. "None of the papers have any vacuum on the flat casting boxes," he said, "but it certainly does help in producing better casts."

McRae continued his report by stating that eight of the papers do not have a flat shaver and six do not have either a router or a jig saw. When using shell casts, either the router or the jig saw will perform the job.

Four of the polled newspapers have no vacuum equipment and the remainder have it on the scorcher, box or both. All of the papers use a roller for molding and he judged that they all have dry mat rollers.

In regard to newspaper color printing, 17 never run color, four run it regularly and the balance run it occasionally. The four papers that run color regularly have curved routers and portable fountains, and one paper has color units. Six of the papers which run no color are equipped with curved routers, which, he said, except in extreme cases, are not necessary equipment.

McRae declared that, in his opinion, the most essential piece of equipment is the flat shaver. He backed that statement with the explanation that, "flat casts are made from mats of various thicknesses and even with the precision boxes we use there is a lot of variation in the thickness of the individual cuts. The type in most plants comes from the machines with very little tolerance in height due to the periodic maintenance of the machines.

"The cuts which offer the least resistance to the molding pressure in a page are therefore the biggest problem. Without a shaver you are aggravating a condition which is already of great concern, and the condition is worse with the tubular plate. There is not a paper represented here which does not shave the curved plate for the press, but with the lockup of the boxes being about the same, there is just as much reason for shaving flat casts as there is for shaving the curved plate."

Type Metal Maintenance

The fundamental rules to follow to obtain proper results from type metal were explained by Clarence Seaman, Vice Pres., Imperial Type Metal Co. Small newspapers, he said, should be able to obtain the same results with type metal as the metropolitan papers do providing they adhere to the procedures suggested by type metal companies. He suggested to the mechanical representatives of the smaller newspapers that they should obtain their metal from reputable type metal firms who can assume control of fluctuations of tin and antimony in the metal.

Non-metropolitan newspapers should also maintain proper remelting equipment, continued Seaman, if good results are desired from type metal. This responsible operation should be supervised by some composing room executive. With government allocations now in affect, newspapers are making an added demand on the type metal supply. This calls for proper maintenance of equipment, he concluded, in order to obtain increased production.

Most Print Direct from Plastic Cuts

CARL BORCKARDT, Sales Representative, Certified Dry Mat Corp., quizzed at the Non-Metropolitan Newspaper Meeting on molding combination for Fairchild plastic engravings and color printing on a small newspaper. Borckardt first emphasized that very few newspapers mold Fairchild cuts. The general practice is to print direct by attaching the plastic engraving to the curved stereotype plate by means of double-side adhesive tape.

The best molding combination for a 65 line screen Fairchild engraving, Borckardt said, is a 3/16 in. hard cork, 0.032 in. red fibre board, and 0.062 in. red fibre board. He reported that the same combination could be used on 85 line screen Fairchild cuts. The ideal height for molding such cuts is just type high. Some have obtained good results with cuts 0.002 in. over type high, according to the speaker.

Borckardt cautioned newspaper mechanical executives not to trust the register marks on newspaper color mats. He suggested proofing the color mats on thin sheets of celluloid and re-registering to the key plate.

Great Lakes Opening Session

THE opening session of the Great Lakes Conference was held Monday morning, January 21 with Conference President Joseph E. McMullen, Asst. Production Mgr., Milwaukee (Wis.) *Journal*, presiding. Welcome from the Detroit newspapers was extended by Lee Hills, Executive Editor, Detroit *Free Press*.

No department on a newspaper, said Hills, is the most important. There is no room for private feuding. He remarked that newspapers, like other industries, require close cooperation from all departments. Rising economic costs have caused mergers of newspapers in order to operate on a profit basis. Mechanical executives are faced with a challenge, he added, to produce a better newspaper with scarcer supplies.

The next speaker, 'MacD. Sinclair, Editor of *Printing Equipment Engineer*, talked on *The Mechanical Executive—Is He Squeezed in a Vise?* His subject covered the conditions under which the mechanical executive should function as the connecting link between both management and employees.

Board of Directors

President—Harry A. Miller, Mechanical Supt., Dayton (O.) *Daily News*.

Vice Presidents (One from each state)—Otto Lepp, Mailroom Supt., Milwaukee (Wis.) *Sentinel*; Horace Parker, Press-Stereo Supt., Richmond (Ind.) *Palladium-Item*; Frank Dassori, Pressroom Supt., Detroit *Times*, and Cecil Watkins, Production Mgr., Sidney (O.) *News*.

Secretary-Treasurer—Don Clark, Stereotype Supt., Grand Rapids (Mich.) *Press*.

The following Directors were chosen: Fred H. Plimell, Composing Room Supt., *Ohio State Journal*, Columbus, O.; Jack Innis, Stereotype Supt., Indianapolis (Ind.) Newspapers, Inc.; W. F. Alexander, Photoengraving Supt., Cleveland *Press*.; LeRoy Schulz, Pressroom Supt., Milwaukee (Wis.) *Journal*; George Feldt, Mailroom Supt., Milwaukee (Wis.) *Journal*; Joseph E. McMullen, Immediate Past President and Asst. Production Mgr., Milwaukee (Wis.) *Journal*.

Mechanical Executive Training

IT IS regrettable that newspaper publishers have not seen fit to establish intensive training courses for mechanical executives. Independent courses now in existence cannot satisfy completely the need for training mechanical men to become better executives because of their general nature and the differences in the systems under which various industries operate. You and I know full well that newspaper management has done a great deal for the mechanical executive. It has established and sponsored the successful sessions of the ANPA Mechanical Conference, it maintains a mechanical department in New York, it is spending money for scientific research and it has always encouraged the regional mechanical conferences. But something else is needed.

Not only is a management-sponsored mechanical executive human relations training program needed in the newspaper printing industry, but the most important element needed is that management be willing to recognize the mechanical executive as the spokesman between management and the rank and file worker. Any training course for foremen will fall short of its objective unless management recognizes that foremen truly are representative of management with respect to printing plant supervision.

I want to cite the example of a foremen-management training course sponsored by management in the hard-bitten commercial printing industry. The management sponsors of this course openly recognize that the mechanical executive is the representative of management in plant supervision. Through the Printing Industry of America, Inc., which is the commercial printing industry's trade association, mechanical and production executives are now being trained with respect to human behavior in the plant. The first move was to have 100 executives from the industry assemble in Washington, D. C., where these men were instructed to function as teachers to other executives in localized areas in their towns. In this PIA Foreman's Training Program, management has taken the initiative and is sponsoring the instruction through affiliated branches of the PIA. The last report received was that over 1000 commercial mechanical and production executives have taken the course in various parts of the country.

It strikes one that it is a rather paradoxical situation when a hard-bitten and highly competitive industry through 4300 printing plants, seeks to train its departmental executives to be representatives of management in plant supervision while management of some 1750 daily newspapers has not seen fit to institute such a course.

Complaint has been made from time to time by newspaper management with regard to high mechanical operating costs. That management is to be congratulated upon its encouragement at considerable expense of mechanical conferences and scientific research. *Printing Equipment Engineer* is sure that the institution of a Foreman-Management training course will pay additional dividends in reduced production costs.

(From address delivered by MacD. Sinclair before Great Lakes Conference, Detroit, January 1952.)

Advocates Column Width Reduction

WILLIAM J. KNANNLEIN, Composing Room Supt., Indianapolis (Ind.) Newspapers, Inc., related his papers' experience over a three year period with an 11 pica 3 pt. column and 3 pt. column rule. With respect to the procedure necessary to change from a 12 pica column to the narrower width, when using high shrinkage stereotype mats, Mr. Knannlein said: "None of the easy steps (for the changeover) seem to me to be of sufficient importance to warrant the gamble, the uncertainty, the questionable reproduction and the lengthening of time schedules necessary to use the high shrinkage mats."

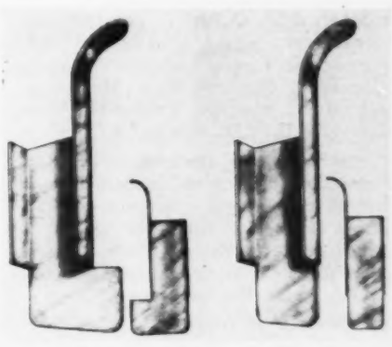


Fig. 1 Fig. 2

Fig. 1.—This clip for use on the Linotype was made by Ted Gardiner, Chief Machinist, Indianapolis (Ind.) Newspapers, Inc., to secure 2 pts. indention on the right end of single col. slugs. The 2 pt. left-hand indention is secured by Mohr assembler slide and left vise jaw simultaneous measure setting device. The operator slides this clip over the right side of the r.h. vise jaw and between the jaw itself and the banking screw. The clips are made of stainless steel, 0.0277 thick. Approx. measurements of the clip body are as follows: Recess width inside to permit slipping freely over the jaw, 9/16 in. wide; from top to bottom (not including curved handle, 1 9/16 in.; tail measurement, 9/16 in.; body depth is 1 in.; measured from the outside, the body from front to back is 1/4 in. On this Linotype clip the tail projection extends outwardly 1/4 in. and is 17/32 in. from top to bottom.

Fig. 2.—The clip for the r.h. vise jaw on the Intertype is identical with the Linotype clip described in Fig. 1 except the tail projection at the lower end of the clip.

Knannlein mentioned the alterations necessary in the composing room to effect the column width reduction: (1) All the steps necessary for the change were taken by the machinists in a single day; (2) All machines were already equipped with either Mohr saws or Mohr assembler measure control devices; (3) Liners for

single and double column slug widths were on hand and were inserted in the molds; (4) A nick was cut in the 12 pica ejector blades to accommodate passing through the narrower mold opening; (5) Hand compositors and markup men were informed at least a week prior to the changeover date, so that all ads set early were set to the new measures. All column measures end with 9 pt., like 11.9 pts., 23.9 pts., 35.9 pts., etc. (6) Indention of the slug 2 pts. on each end was secured as follows: The left-end slug indention was secured by turning the Mohr assembler slide measure control to 11.7 or 23.7. A simple clip, readily insertable or removable from between the right side of the r.h. vise jaw and its banking-adjusting screw by the operator, was adapted by Ted Gardiner for use on both Linotypes and Intertypes.

Regarding page width, Mr. Knannlein said: "Occasionally we experience some trouble on general advertising plates but ordinarily only on single column ads. If it isn't possible to reproduce the ad by resetting, we then have a wide page. If time is available the stereotype department shrinks the page containing the wide ad a bit more."

TTS Wire Service Plant Operation

AT BOTH the Non-metropolitan and Composing Room sessions, Teletypesetter and TTS Wire Service Operation were discussed. A panel discussion at the non-metropolitan newspaper meeting was conducted by Mr. Watkins. Members of the panel were Carl Borckardt, Sales Representative, Certified Dry Mat Corp.; J. Les DuErmit, Mechanical Supt., Middletown (O.) *Journal*; Mr. Duncan; Clarence Seaman, Vice Pres., Imperial Type Metal Co.; and Earl C. Shaeffer, Production Mgr.) Zanesville (O.) Publishing Co.

Shaeffer related the experience of the Zanesville (O.) Publishing Co. He stated that supervision of Teletypesetter perforator operators should be under the jurisdiction of the composing room foreman. Good supervision, he added, is the key to successful operation.

It is difficult, Shaeffer said, to put a yardstick on the proper length of time for training Teletypesetter operators. He estimated that training periods could range anywhere from 3 months to one year. In answer to a question of whether men or women make better perforator operators, it was his opinion that women fill the requirements much better. To begin with, women are better typists and therefore grasp the keyboard much faster. He cited their good attendance as another argument in favor of women operators.

The question arose on what was the best plan to follow in handling Teletypesetter wire tape. DuErmit told of the procedure followed at the Middletown (O.) *Journal*. A reperforator at the *Journal* is turned on by an electric clock to received copy coming in over the early morning wire. By the time a man comes in at 6 a.m., a sufficient amount of tape has accumulated to permit him to start running the bulk of the copy through the Linotypes. This man is familiar enough with the nature of the copy received to monitor it and toss out the stories he thinks the editor won't use. He then proceeds to run the entire morning wire. By 8 o'clock in the morning, there have been as many as 12 galleys of type available. DeErmit claimed that Teletypesetter copy available from the wires has solved the production problem on straight matter at the *Journal*.

375 Lines per Hr.

The next several questions submitted to Mr. Watkins involved the speed of Teletypesetter operated linecasting machines. Mr. Shaeffer was asked how much live type was produced per man hour at Zanesville. He replied that of the six machines in his plant, each averages approx. 2600 lines per day on all types of copy. He termed as satisfactory, a Teletypesetter equipped linecasting machine that is producing 375 lines per hr. He also remarked that they handle all types of copy on standard Intertype linecasting machines running at 8½ lines per min.

The question of whether the development of the Linotype Comet linecasting machine has been decisive in switching to Teletypesetter operation, drew a variety of comments. At the Middletown *Journal* where two Comet machines were recently installed, DuErmit said that older machines have proved satisfactory provided they are properly maintained. One executive observed that despite the increased speeds of linecasting machines, the speed of the Teletypesetter perforator operator remains the same. Mr. Shaeffer remarked that a newspaper should have two extra perforating machines for punching tape to keep up with the high speed linecasting machines.

Operation of a keyboard automatically is much different from manual operation, according to Mr. DuErmit. He said that 7½ to 8 lines per min. is a good production speed for automatic operation. He reported that his paper had experienced difficulty operating the Comet machine manually. The Comet machines were started off at 8 lines per min. and as speeds were increased, various adjustments had to be made. The panel member remarked that there was all the difference in the world in the operation of a machine producing 8 lines per min. and one operating at 10 lines per min. Shaeffer added that in his opinion best results were obtained on the Comet, operating at 10⅓ lines per min.

Teletypesetter Matrix Life

Mr. Shaeffer was questioned on the life of Teletypesetter matrices. He replied that the average rate of matrix mortality at Zanesville was 2.6 mats per week. He added that they follow the same maintenance schedule as on manually operated machines. He said that proper maintenance is a matter of good supervision.

DuErmit remarked that if a linecasting machine is worth operating, it should be worth the time to service it properly. Teletypesetter operated machines have to be maintained, he said, just as manually operated machines do. In order to achieve steady operation, it is wise to watch closely for damage done to mats.

The panel discussion returned to Teletypesetter wire tape when the question arose as to whether newspapers operating from the wire experienced any bad tape. Shaeffer commented that the biggest proportion of the trouble was improperly set lines. He observed that there was a great deal of blank space between stories until he made the suggestion that they cut this blank space down to 2 in.

DuErmit praised the quality of Teletypesetter wire tape although he remarked that he has experienced some tight and some loose lines. Perforator operators, he said, are trained for a period of three months.

On the subject of the advisability of splicing Teletypesetter tape for running through the keyboard unit, Shaeffer opinioned that he didn't think it was practical and took too much time. DuErmit, who agreed with Mr. Shaeffer, added that the operator can feed a new tape into the machine just as fast as he can splice it.

TTS Wire Networks

Frank Phillips, Teletypesetter Corporation, stated that last year AP, UP and INS wire Teletypesetter wire networks were instituted. Such service is now available in most sections of the U.S. and Canada. Subscribers receive news stories in pre-composed punched tape form ready to be run through the Teletypesetter line-casting machine in the composing room. In addition a new kind of Teletype printer types the copy in caps and lower case, line for line, just as the story will appear in type.

Phillips stated he recently visited the transmission headquarters of a United Press circuit in Chicago which serves afternoon papers in nine states. It is in operation from 5 a.m. to 3 p.m. Approx. 4500 lines are transmitted during the 10 hr. period.

Each dispatch is identified by a number and guide line on the printed copy and by a slug guide line in type as well as a visual number perforated in the tape. The general stories going over the trunk line are serially numbered from 1 up.

The stories going out on the state and regional splitoffs are similarly numbered, but they have their own series of numbers. They are further identified by a letter visually punched in the tape after the number.

After its receipt in the newspaper plant, the methods of handling the punched tape vary from one plant to another. In some instances, newspapers with ample line-casting machine capacity set all of the tape. This, of course, results in over-

Mohr Saw Bulletin

As explained in the *Mohr Saw Users' Bulletin*, available from the Mohr Lino-Saw Co., many newspapers are resorting to the use of narrower column rules and cutting down the column width of both news and classified columns.

To meet this situation with respect to composing room operation, the company suggests that Mohr Measure Controls can be installed on straight matter line-casting machines. The attachment makes possible any point or split-point setting for single or double column news or classified matter.

Through turning the dial, both left hand vise jaw and assembler slide can be set to the same measure simultaneously. Instructions are given in the bulletin for running in initials with the device.

The attachment enables the user to secure any even or odd-point column width slug, or where necessary, to indent type matter automatically on the left side of the slug while securing right-hand indention through the use of a thin space or r.h. vise jaw clip.

---

set. This type was held until the end of the day in case there should be need for additional composition.

In other newspaper plants, the tape is edited against cap and lower case printer copy and unwanted stories are cut out. This is easily done because of the visual number by which each dispatch is identified.

The physical cutting of the tape is done in the editorial department in some cases. In others it is done in the composing room. Some newspapers even go so far as to cut each story off the roll of tape and hang them on pegs numbered, 1, 2, 3, etc., to be chosen as desired. Mr. Phillips explained that at this stage of transmission no study has been made to determine the most efficient method for cutting tape.

The speaker said there are certain basic standards that must be adopted by the newspapers on such a network if they are all to be able to use the same tape. These are as follows:

1. All newspapers on the circuits must use unit font matrices cut on a lower case alphabet length of 118.1 pts. There are now 19 of these type faces available.
2. Spacebands must be the so-called Teletypesetter variety, which have a wider justification range than regular spacebands.
3. The keyboard layout must be the standard fractional layout as used by the press associations.
4. The column width must be 12 picas.

Type faces have been cut in response to the desire of many newspapers to conserve newsprint by going to a column width of 11 picas 9 pts. These are 8 pt. faces with a lower case alphabet length of 115.6 pts. It will set the narrower column width from the tape received over the press association Teletypesetter networks. I was informed this alphabet length will set 11 pica 8 pt. and 11 pica 10 pt. columns as well.

Financial copy is now transmitted by AP for morning newspapers. Type faces used are unit fonts with a set size of 6 3/8 pts. and a lower case alphabet length of 94.0 pts. There are four such faces available. Decimals or fractions are optional with the subscriber. He may obtain whichever he prefers, from the same tape. Line length is 12 picas.

Intertype High Speed Machine

Frank Foster of Intertype Corporation's engineering department, discussed Intertype High Speed Machine. When equipped with the delay-action Teletypesetter keyboard operating unit, it will produce up to 12 lines of single column matter per minute. Mr. Foster described various features of the machine, some of which are as follows: The machine can be supplied with one, two, three or four magazines. It was stated by the speaker that the Intertype high speed feature can be applied to any pedestal base Model C. The assembler slide brake is provided with a release or jogger which permits the last matrix in a line to be straightened up should it happen to be leaning toward the right when the line assembly has been completed. The release is actuated by a cam on the keyboard operating unit. The Intertype automatic quadder permits normal setting of justified lines which constitute the greatest part of newspaper lineage; it automatically quads out lines at the end of paragraphs; it permits automatic flush left composition of any length. The speaker said that inadvertently composed short lines are permitted to be cast. "Thus," said he, "if there is a shortage of matrices or any condition which prevents the full line from assembling, the short line will cast and will be detected in the proof.

Oil cushion cylinders provide smooth action for the delivery, transfer and distributor shifter levers.

"Three-pitch distributor screws," said Mr. Foster, "permit the matrix lift to get matrices into the screw threads more quickly. Once matrices are on the distributor bar they are moved along at normal traverse speed."

The machine may be equipped with an overhead motor drive or an underslung V belt drive with a standard motor, thus in the latter case eliminating gears and pinions.

In concluding discussion of the features of the High Speed Intertype, Mr. Foster described a tight line safety device in the delivery slide long finger. If a line is overset, the safety will stop it before the line is raised fully to the delivery slide release position. Damage to matrices in tight lines in the vise jaws is thereby prevented. An assembler slide latch extension permits one-hand operation when returning a line to assembling position. The line is returned to assembly position with one hand, leaving the other hand free to slide out the assembler slide.

The Comet Linotype

Louis Rossetto, Director of Research, Mergenthaler Linotype Co., discussed the planning and engineering engaged in before starting manufacture of the Comet machine. The machine was designed so as to be suitable for high speed operation whether operated by Teletypesetter tape or manually. His company wanted a machine of maximum simplicity and the machine was designed with these thoughts in mind. During the course of his address, he showed a number of stereopticon slides.

In analyzing the proposed machine to meet the requirements of high speed as well as automatic-manual operation, the matrix circulation system was first given attention. At an operating speed of 12 lines per min., it would be necessary to pull 540 matrices per min. or approx. 9 matrices per sec. from the magazine. The standard magazines were positioned at a 70 deg. angle and the assembler entrance was redesigned to guard against transpositions. The motions (strokes) of the first and second elevators are started and ended the same as on standard Linotypes but the in-between travel is highly accelerated. The action of the distributor clutch is five times as light as the standard clutch to soften the impact of matrix interference with the distributor channel entrance partitions. An electrical approach through working with Teletypesetter Corporation was adopted, to provide automatic signals. Thus, when a distributor stop occurs, a micro-switch is closed and the keyboard operating unit is stopped. If the operator neglects to start the assembler matrix delivery belt, the keyboard operating unit cannot be started. Another safety device is provided in the assembling elevator in the case of an overset matrix line, which holds the line and at the same time throws the keyboard operating unit out of operation.

Electricity employed in the signal system is 24 v. which eliminates the possibility of physical injury to personnel.

In the casting system, the various machine parts were modified or reengineered to work in harmony with the accelerated speed of the machine.

Mr. Rossetto stated the Comet motor drive is designed to permit operation in one-third rpm increments from 6 to 12 lines. When first installed, the machine may be operated at 8 lines per min. Then after the attendant has become familiar with operation, the machine may be stepped up to 10 lines and finally to the max. speed of 12 lines per min.

Milwaukee Journal Dispatch and Planning

Edgar J. Moldenhauer, Planning and Dispatch Mgr., the Milwaukee *Journal*, presented an illustrated address entitled *Advantages of Proper Planning and Dispatching in the Production of Today's Newspaper*. He showed a number of slides pertaining to important operations in this department. His presentation was extremely interesting. It was apparent as Mr. Moldenhauer's discussion proceeded, that a lot of planning and engineering has

gone into the organization and procedure improvement of this department. Newspaper manufacturing operations are difficult to control because of the peculiar nature and the number of people involved. But it seems that in the case of the Milwaukee *Journal* a workable control system really has been achieved.

Machinists Delve Into Maintenance

AT THE Machinists' Session, a variety of maintenance problems came up. A number of machine maintenance techniques were discussed. William Easton, Chief Machinist of the Milwaukee (Wis.) *Journal*, presided as chairman; he was assisted by Co-chairman Theodore Gardiner of Indianapolis (Ind.) Newspapers, Inc. Walter Severin of Intertype's Chicago agency spoke on a number of improvements in Intertype design. John Hilpman, Engineering Dept., Mergenthaler Linotype Co., discussed recent improvements in the design of Linotypes. Also at the speakers' table were Louis Rossetto, Research Director, Mergenthaler Linotype Co.; I. J. Challifoux, Chief Machinist, Cleveland *Plain Dealer*, and George Bolton, Chief Machinist, South Bend (Ind.) *Tribune*.

Some of the discussion of general interest is as follows: It was brought out that the contacting surface of the back mold wiper should bear completely against the mold to provide as much wiping surface as possible. With respect to a lubricant for the wiper felts, it was stressed that whatever lubricant is used it should be applied sparingly so as not to foul matrices. Mr. Severin however, stated his company does not recommend application of any kind of lubricant because of the tendency of those taking care of the machine in many instances to apply too much. Some machinists use mutton tallow and graphite, some use lard oil, while a scattering number use paraffine or Johnson's wax. It was felt that some lubricating agent should be used because of the impossibility of adjusting the back trimming knife in such a way that in a multiple mold disk the knife will keep all molds clean and free of metal accumulations on the back.

The next question *What causes improper alignment of letter characters?* referred particularly to lower case e and o matrices on a Teletypesetter-operated machine in duplex rail alignment position. The following were mentioned: (1) Sheared lower front or lower back matrix lugs; (In the case of the black-letter or auxiliary alignment position, the duplex rail can shear the lower edges of the lower front matrix lugs because an overset matrix line prevents the first elevator settling fully on the vise cap.) (2) First elevator jaws too tight or spread apart too far; (3) Adjustment of the first elevator banking screw should permit a rise of 0.010 in. when the first elevator is lifted for alignment on matrices up to 18 pt.; on 24 pt. two-letter matrices, the first elevator banking screw should not be permitted to rise more than 0.005 in. (4) The first elevator link eyebolts and particularly the spring within the barrel should be inspected for elongated holes in the eyebolts and for a weak spring; (5) The first elevator must align parallel with the mold aligning grooves since the position of the mold itself is unadjustable; therefore, effect the parallel relationship by altering alignment of the first elevator jaws. Chairman Easton stressed that when analyzing matrix lug damage it should be understood the roman alignment is effected by means of the underside of the upper lugs, and the auxiliary or black face alignment is effected through an upwardly pushing action of the duplex rail against the underside of the lower front matrix lugs impinging the upper edge of the lower back lugs against the underside of the upper mold alignment groove.

Phil Hammond of Intertype Corporation, stressed that the pot mouthpiece, particularly in the commercial plant where mold liners are changed frequently, should be carefully dressed when fitting it to the molds so that the mouthpiece will bear equally at top and bottom against the mold. He has repeatedly run across instances where the one doing the stoning has removed more surface from the lower part of the mouthpiece than from the top. This resultant unequal pressure against the mold not only causes back squirts but also affects the casting lockup of the mold and matrices. He stressed watching the pot lever compression spring from time to time. Occasionally, these springs become "set" or lose their tension property.

It was the consensus of opinion among the machinists that frequency of cleaning keyboards is a matter of judgment upon the part of the machinist. William Easton Milwaukee (Wis.) *Journal* machinist, said he cleans the keyboard cams once a year but lubricates the cams every three months. Ted Gardiner, Indianapolis (Ind.) *News*, does likewise, but also buffs the cam rims and ends of yokes. All agreed that the lubricant should be a fish oil derivative such as clock oil.

George Bolton, South Bend (Ind.) *Tribune*, said he boils the keyboard cam yoke frame assemblies once a year to clean them. He designed a tank with gas burners into which he pours water and puts in a chromic acid base cleaner obtainable from Linotype Parts Co. During the boiling period, low pressure compressed air agitates the water. After the boiling period has been completed, the assemblies are taken to a sink and rinsed in hot running water. They are then dried with compressed air and the cam pivots are oiled. This procedure is followed once a year. Mr. Bolton explained that the cleaning action of the solution at boiling temperature cleans out dirt from the pores in the brass cams and yokes and permits the new oil to do a maximum job of lubrication.

A unique method for determining frequency of keyboard cleaning is utilized by V. M. Anderson, Machinist, London (Ont.) *Free Press*. The time for cleaning

Newspaper Mechanical Executives and Representatives of Equipment and Supply Firms Caught by the Camera at the Great Lakes Mechanical Conference

1.—Joseph Ackerman, Stereotype; Edward Reich, Composing Room Supt.; Harry Miller, Mechanical Supt.; C. F. Riedmiller, Photoengraving Supt.; Everett B. Hall, Pressroom Supt. and Ralph Zimmerman, Mailroom Supt., all of Dayton (O.) *Daily News*.

2.—Cecil Watkins, Production Mgr., Sidney (O.) *Daily News;* Walter Wines, former Manager of the ANPA Mechanical Dept.

3.—Paul Larsen, Machinist, and Earl Johnson, Composing Room Supt., Moline (Ill.) *Dispatch;* Don Clark, Stereotype Supt., Grand Rapids (Mich.) *Press*, and also Secretary-Treasurer, Great Lakes Conference; Jules Klein, Director, Radio-Recording Orchestra, Detroit, who managed the entertainment program of the Manufacturers and Suppliers' party.

4.—Jack Landau, Lake Erie Engineering Corp., Buffalo, N. Y.; Paul Brannon, Pressroom Supt., Cleveland *Press;* Frank Rice, Sales Representative, American Roller Co.; D. Jack Kenney, Pressroom Supt., Muskegon (Mich.) *Chronicle*.

5.—George Kunz, Composing Room Supt., South Bend (Ind.) *Tribune;* Joseph P. Quigley, Asst. to Vice Pres., Lanston Monotype Machine Co.; Theodore A. Serrill, General Mgr., Pennsylvania Newspaper Publishers Assoc.

6.—Ernie Scherer, Photoengraving Supt., Detroit *News;* Cecil Watkins, Production Mgr., Sidney (O.) *Daily News;* J. E. Charlton, Photoengraving Supt., Pittsburgh *Press*.

7.—E. Curtis White, Pressroom Supt., Indianapolis (Ind.) Newspapers; Robert A. Slover, Photoengraving Foreman, Cleveland *Plain Dealer;* Joseph E. McMullen, Asst. Production Mgr., Milwaukee (Wis.) *Journal*, and Immediate Past President, Great Lakes Newspaper Mechanical Conference.

8.—Roy Coates, Pressroom Supt., Grand Rapids (Mich.) *Press;* Edgar Flint, Howard Flint Ink Co.; Blanchard Wilson, Stereotype Supt., Cleveland *News;* Frank Dassori, Pressroom Supt., Detroit *Times*.

9.—A. T. Spencer, Mechanical Supt., Hillsdale (Mich.) *News;* Frank Phillips, Teletypesetter Corporation; Robert M. Frame, Press-Stereotype Supt., Earl C. Schaeffer, Production Mgr., Zanesville (O.) Pub. Co.; and S. G. Carmichael, Composing Room Supt., Pittsburgh (Pa.) *Press*.

10.—John Barron, Mechanical Supt., LaSalle (Ill.) *News-Tribune;* J. W. Hilmer, Press-Stereo Foreman, Waukesha (Wis.) *Daily Freeman;* Paul S. Ginn, Pressroom Supt., LaSalle (Ill.) *News-Tribune*.

1
2
3
4
5
6
7
8
9
10
CTYPES

keyboards is regulated on a mileage basis. His 20 manually operated machines are equipped with Linometers. Daily records are kept of each machine's production. When a machine has produced 250 thousand lines of type, the keyboard parts are cleaned and the cams and yokes are oiled.

Pressmen Consider Problems

THE Pressroom Session was conducted by E. Curtis White, Pressroom Supt., Indianapolis (Ind.) *Star-News*, who introduced Herman Wedemeyer, Pressroom Supt., Detroit *Free Press*. Wedemeyer revealed the results of tests he had conducted on various makes of newspaper press blankets and the conclusions he had reached from such tests. His talk, which will appear in an early issue of *Printing Equipment Engineer*, was titled *Gauging Newspaper Press Packing*.

The next speaker, Paul O. Brannon, Pressroom Supt., Cleveland *Press*, discussed two controversial subjects in newspaper printing. One, *Collect vs. Straight Runs*, cited arguments in favor of running a large newspaper collect, especially from the production cost viewpoint.

Use of *R.O.P. Color in Daily Newspapers* was the subject of Mr. Brannon's other talk, which will be printed in an early issue of *Printing Equipment Engineer*.

Effect of Additional Shrinkage in the Pressroom was presented by Frank Dassori, Pressroom Supt., Detroit *Times*. Dassori explained that ANPA Mechanical Bulletin No. 448 treats in detail the necessary steps to be taken in the change over to narrower rolls on all types of newspaper presses.

He described the conditions encountered at the *Times* when they first took on the problems of shrinkage. He said solids were weakened and the cuts darkened up generally. The speaker said he soon discovered that there was little that the pressroom could do to correct this condition.

Dassori told the Conference members that from the experience at the Detroit *Times*, the finished product was brought back nearer to normal through experiments with various molding combinations made by the stereotype department. Although this took time, patience and effort, he stated, it eventually brought them closer to their former standard.

In conclusion, he said that the pressman in many circumstances similar to this, can only print what he is given to the best of his ability. The end result is largely determined by what is on the plate supplied, just as the stereotype plate depends on the quality or adaptability of the copy received to make a printable plate.

To Be Published In Early Issue

A NUMBER of excellent addresses delivered at the recent Detroit Great Lakes Conference are not published in this issue. Because of editorial space limitations it was necessary to defer their publication in full to an early issue of *Printing Equipment Engineer*. These are:

High Shrinkage Mat Molding Materials, by Ferd Mier, Stereotype Supt., Detroit *Free Press*.

ROP Color in Daily Newspapers, by Paul Brannon, Pressroom Supt., Cleveland *Press*.

Newspaper Press Packing, by Herman Wedemeyer, Pressroom Supt., Detroit *Free Press*.

Automatic Mail Plate Production, by H. C. Woodland, Addressograph-Multigraph Corp., Cleveland.

Collect vs. Straight Runs

By PAUL O. BRANNON*

**Pressroom Supt., Cleveland (O.) Press. A talk delivered at the Pressroom Session of the Great Lakes Newspaper Mechanical Conference, Detroit, January 1952.*

THERE is a division of opinion among pressroom superintendents as to the relative merits of collect and straight runs. In determining the practicability of these respective runs, there are several factors to be considered: namely, the number of deliveries available, the time element as it relates to the production schedule, the number of pages carried in any particular issue, manning tables, the number of sections desired, etc.

In Cleveland we normally operate four straight run deliveries on all sizes up to 50 pages inclusive. We collect all collectible products above this size and operate six deliveries.

It is seen, therefore, that the number of deliveries for collect runs is increased 50 per cent above that of straight runs. It is also true that each folder thus operated, when traveling at the usual rate of speed, will deliver only one-half of the potential production of a folder producing the same size product from duplicate plates.

It appears, without analyzing the foregoing statement, and by looking only at the potential angle, the running of 6 presses collect in lieu of 4 presses straight, automatically slows production 25 per cent before the run has started. However, let us not confuse potential with actual production.

At the Cleveland *Press*, we have a minimum of two collect runs almost every week in the year. We frequently have three, and occasionally during the peak season, four or even five.

First, let us consider, for example, a straight run of 64 pages. Here we have 8 webs going into one folder. This means we have 8 chances of losing a sheet and when this occurs production ceases for this entire 8 unit press. This likewise, temporarily, cuts production 25 per cent on a 4 press operation. The leads, of necessity, are long requiring more time to re-thread with a resultant loss of more production. Also, long leads are more difficult to pull up for folder cut-off and alignment. During this entire process the 7 sheets remaining in the press must be counted as folded waste at the rate of almost 1 lb. of newsprint per copy.

Now let us look into a plant having only 8 units and two folders. It is advisable to operate two presses collect rather than one double octuple straight. For if this same product were run collect there also would be a combined total of 8 sheets. If one sheet is lost the other press continues even though production is at the rate of one-half the normal straight run output. This would, at least, insure a constant flow of papers into the mailroom. Even one flat roll will retard production on any press, but one bad roll in 8 will reduce the speed of only one delivery when two octuples are running collect.

All pressmen are aware of the fact that the running hazard is greatly increased by the addition of several webs necessary for flat newspapers. This has become increasingly evident in recent years with the tremendous gain in linage coupled with an inferior quality of newsprint. Most newspapers are, in these times, compelled to use the paper of many manufacturers in order to get the necessary tonnage to meet their needs. We, on some occasions have had a different brand coming through each unit simultaneously.

No one will claim production suffers if the number of deliveries is doubled for collect runs. Nor do we contend that two folders, one of which is running collect while the other runs straight, will produce the same number of papers in the same running time. But few presses constantly run up to their maximum geared speed.

We invariably show a lower folded waste percentage even up to 80 pages collect than we do when running 7 and 8 rolls straight, and frequently the total room hourly average, while not impressive, is equal to that of straight runs and has on certain runs actually been higher. And this is done on 6 presses, not 8, as would be the case if the normal number of deliveries were doubled for collect runs.

High hourly production looks good on paper but actually means little so long as the reader and advertiser are satisfied.

Remembering, of course, that press crews are universally guaranteed a full day's pay for reporting for work, and assuming too that the entire circulation is produced within the regular unit of hours.

No two pressroom operations are identical, and manning tables also vary in different cities. In our plant, the cost of running four 8-roll presses is slightly above that of six octuples collect. Even if the reverse were true, we believe collect runs for large papers can be justified.

Collect runs are helpful in color work. They not only provide a greater latitude for color positions in the paper, but by having one plate of each page per press, the register problem is simplified. The routing time in the stereotype department is also reduced.

Many of us have found that folders frequently deliver a more neatly folded product when running collect. This is particularly true with large newspapers. This is due to the fact that one set of pins is silenced in the folding cylinder thereby relieving the constant pull on the cross-associate section.

In plants where the necessary equipment is available it may be that by running collect and printing more pages in a single operation, many shifts both in the pressroom and mailroom which are now used on predated supplements could be eliminated. This would offset completely, or at least to a great extent, the extra cost of more crews on the day of publication.

We realize this subject is controversial enough without our becoming involved in any department other than the pressroom. However, we believe handling is facilitated in the mailroom on collect runs and, who knows, perhaps the stereotypers might prefer to cast fewer plates than would be needed for large papers on straight runs. We are also of the opinion that a paper delivered in 4 sections is advantageous to the advertiser since it provides more outside pages, and even to the subscriber, for it affords an easier division of the paper among various members of the family.

Certainly we can obtain a 4 section paper by using two balloon formers on straight runs, but to us it seems like doing it the hard way. Then again, the cost would be greater since most contracts provide that an additional man be carried on each crew for such runs. Our balloon formers are seldom used. Of course, if a 3 section paper of standard size is wanted there is no alternative. We have on several occasions printed a paper having 3 sections by using only the two lower formers. Needless to say, however, one section was tabloid.

Finally, we believe the question of collect versus straight runs may be likened to the story which I am sure all of us have read at some time during childhood. It is the story of the tortoise and the hare. It seems that a race was run between these two animals. We are told, that because of his long legs and all around agility, the hare broke on top and set a terrific pace —for a while—during which time the lowly tortoise was persistently trudging along at a comparative snail-like fashion. But we are also told that the turtle was basking in the sun and resting his feet, for some time, waiting for the rabbit to put in his appearance at the end of the run.

Effect of High Shrinkage Mat on Halftone

L. J. GRINER, Production Mgr. of the Detroit *News*, addressed the Great Lakes Conference, Statler Hotel, on January 21. Following is an abstract of his address containing some thinking which should be recognized by all newspaper mechanical executives:

I don't think any of the four stereotype mat manufacturers will tell you the 1 in. shrink mat, or any other mat he makes regardless of shrinkage, will be a panacea for all the ills of newspaper printing. For instance, the high shrink mat won't correct the faults of a badly posed, badly lighted, poorly exposed, developed and printed photograph of your Aunt Lucy's Tuesday afternoon bridge club. It won't correct faults in the exposing, stripping and printing of a negative in your photo-engraving room. It will not automatically remove the shoulders from a two or three-bite halftone and give you a good cone or pyramid shaped dot. Nor will it add two, three or four thousandths depth to a shallow zinc halftone. Missing detail in photographs is not added by the mat regardless of the amount of shrinkage.

Probably more newspaper people are concerned about reproduction of halftone illustrations in their papers today than ever before. I know we are paying more attention on the Detroit *News* than we ever did. Whether we realize it or not—and many of us don't—we now have a newer and more critical reader of our newspapers. It is good that we are concerned with the reproductions of our halftones, because in too many papers that reproduction has not been too good.

PICTURE AS SEEN ON YOUR 20" TELEVISION
COMPARATIVE SIZE OF TELEVISION AND NEWSPAPER PICTURES
SAME PICTURE CROPPED AS SEEN IN THE DETROIT NEWS SPORT SECTION

Graphic Comparison Between Same Illustration on 20 in. Television Screen and 2 col. Newspaper Photoengraving—L. J. Griner, Production Mgr., Detroit *News*, showed this comparison in greatly enlarged form during his address at the Great Lakes Newspaper Mechanical Conference, Detroit, January 21. Even this miniature reduction of Griner's display, should give newspaper executives something about which to think.

The day after Christmas an old gentleman who lives across the street and the 10-year-old boy next door were having quite a heated discussion. What about? All the things I used to talk about—sharpness, detail, brilliance, contrast and the size of the picture. Only they weren't talking about halftones in a newspaper. They were talking about the picture on their television receivers. Either or both of them, and millions like them, can reach out and do what neither you nor I or hundreds like us can do. They can focus the picture if it is too fuzzy. If they don't like the contrast, the second knob on the left changes that. The brilliance can be adjusted to suit tired eyes or adjusted for dimming room light. I wish it were that easy for us.

One of the things we can do to improve our halftone printing with high shrinkage mats is to disillusion ourselves that high shrinkage has any great effect on the tonal values of a halftone. It doesn't. Let's forget the old malarkey that a 65 line screen halftone becomes a 70 or 75 line because of high shrinkage. It doesn't.

I used to believe the dot pattern of a halftone was badly distorted by high shrinkage. That I know to be false. It does not become distorted.

We use a 65 line screen in the Detroit *News*. Our original zinc halftone cuts are not 65 lines across the width of a page. They are 46 lines or dots across the width of the page and they are 46 lines or dots across the depth of the page. Now, on the diagonal measurement of our original halftone cuts it is a different

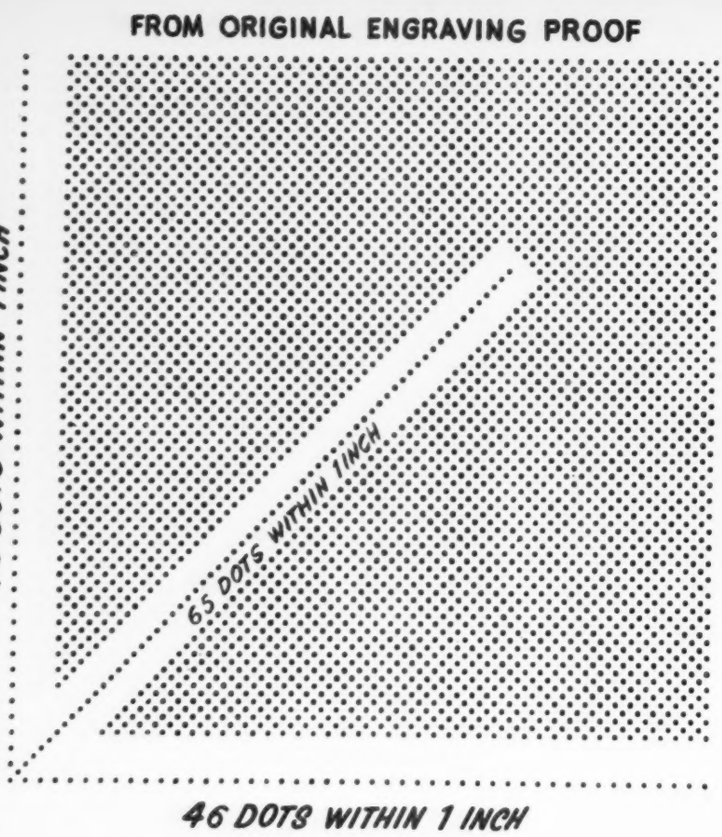


Fig. 1.—This diagram was reproduced from a 1 in. square enlarged section of an original photoengraving proof. A 65 line screen was used in making the engraving. L. J. Griner, Production Mgr. of the Detroit *News* showed Figs. 1 and 2 by projection to call attention to a somewhat common fallacy that a 65 line screen halftone has that many dots either in a horizontal or vertical line. The 65 dots per inch occur when the dots are counted at a 45 deg. angle. There are 46 dots per in., counting either horizontally or vertically.

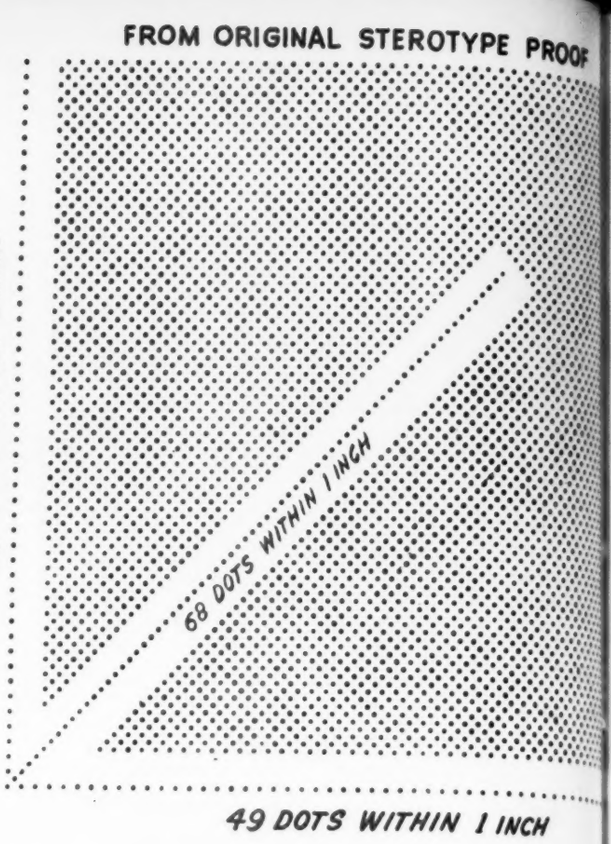


Fig. 2.—When the same 65 line screen section from a photoengraving is reproduced in stereotype plate form where 1 in. dry mat shrinkage is employed, there are 49 dots per in. horizontally, 48 dots vertically and 68 dots in a line at a 45 deg. angle as shown in the proof from which this cut was made. Mr. Griner stated the difference, of course, is caused by greater mat shrinkage across than up and down the page owing to the general direction of the fibre position in the mat. The point he wished to make, however, is that there is not enough difference in the dot arrangement to distort the appearance of a halftone picture. Poor appearance of halftone illustrations is due to any one or more of a number of causes which he enumerated in his address.

story. Here we find we do have 65 lines to the inch in the original halftone cut.

Halftone screens in a photoengraving camera are not measured or ruled across the width of the screen or across the length, where the maximum and minimum shrinkage of a dry mat occurs. They are measured or ruled across the diagonal or on a 45 deg. angle. The resultant pattern in a halftone cut is exactly the same. What happens to the cut when it is shrunk half an inch or one inch? Practically nothing happens. The distortion we have all heard so much about is actually infinitesimal, the screen pattern does not increase to the extent so many have assumed.

Let me tell you what happens in our plant. This we know. We start with a 65 line screen in the camera. We obtain a cut with 65 lines or dots per in. on the diagonal measurement, 46 lines or dots per in. in width and 46 dots or lines per in. in length. After stereotyping with 1 in. shrinkage mats we have the following: In a proof from a curved plate on our presses, in width we have 49 lines or dots per in., an increase of three dots; in length we have 48 lines or dots per in., an increase of two dots, and on the diagonal measurement we have 68 lines or dots per in., an increase of three dots. The distortion—that is, the relationship of the dots to each other as compared to the original—is so small that it could cause no effect upon the tonal values of the halftone. You can verify this measurement in your own plant whatever screen you happen to be using. The end result will be relative. Everything will be in proportion. The very slight screen increase in numbers of dots crosswise or lengthwise in halftone illustrations up to and beyond one full inch shrinkage is practically negligible.

Newspaper Color Photoengraving

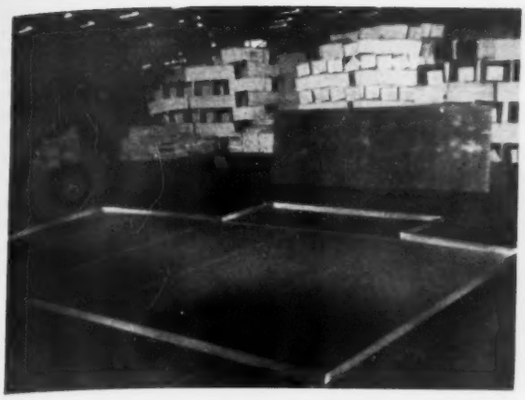
CHAIRMAN and co-chairman, respectively, of the Engraving Session were Robert A. Slover, Photoengraving Supt., Cleveland *Plain Dealer*, and Alfred J. Lamberg, Photoengraving Supt., Detroit *Times*. The first speaker, Bob Dumke, Manager of Photography at the Milwaukee (Wis.) *Journal*, discussed *Color Reproduction by Photography* in which he described and demonstrated the method of making bromide prints. Assisting Mr. Dumke in his interesting presentation were Micky Strocker, Asst. Mgr. of Photography, Detroit *News*, and Connie Miller, a Detroit model.

Dumke told his audience that the U. S. public demanded and used 10 times more color material last year than it did in 1945. He offered the following statistics as evidence of the growth of color. In 1930, the magazines in this country were running 11 per cent full color; in 1950, 34 per cent; and at present, are nearing 50 per cent. He cited an issue of *Life* magazine as an example, in which 74 per cent of the ads were in color.

The speaker revealed that last year, the Milwaukee *Journal* ran a total of 5 per cent of its advertising lineage in color. Gimbel Bros. store in Milwaukee ran 90 per cent of its rotogravure ads in color, and 75 per cent of its nearly four million lines of r.o.p. advertising in color, according to Dumke.

He said that the answer to producing color for newspapers is to obtain the black and white separation prints quickly and economically. To do this, he showed how the one-shot camera is used which takes three simultaneous pictures, each through separation filters—red, green and blue. Since the camera takes negatives, the filters used are the opposite or complements of the printing colors.

(*Continued on Page 70*)



View of one of the 18 ga. sheet metal oil drip pans with welded seams and corners for presses in pressroom of Parthenon Press, Nashville. Tenn. The top edge of the flanges is flush with the floor when placed in the depression provided for it after lifting sufficient wood flooring. The wood flooring rests directly upon the cement floor beneath. Before lifting the floor to accommodate the pan, the area is outlined with chalk to determine the floor area to be lifted.

Metal Pans, Lead Footings Under Presses

A $2 million expansion program of the Parthenon Press, Printing Division of the Methodist Publishing House, Nashville, Tenn., is now complete except installation of certain offset press units and other equipment.

Installation of new presses and moving to new positions of older units has given the maintenance department of this firm an opportunity to carry out a plan to place sheet metal pans under all presses and other pieces of equipment where lubrication with oil is carried out at frequent intervals. The advantages of containing the overflowing oil to protect the floor underneath and to protect the wood block floor in case the oil becomes accidentally fired, are obvious. In addition, the accident hazard to pressmen is greatly reduced.

Plant porters are required to clean out with waste or cloth wipers, all accumulated waste oil along with the regular clean up of the press.

Pans of 18 ga. sheet metal are constructed right on the pressroom floor from specifications indicated by chalk marks on the floor. When formed and the corners have been welded together, the pan is sunk to the concrete underneath the wood floor by removing the wood block within the chalk-marked area. The extension of the pan on the side (as seen in the illustration) is to provide space upon which the press motor rests. The pans are made with flanges bent at right angles to the bottom and fit tightly against the wood block edge in the depression in the floor so that the top edges of the flange are flush with the top surface of the floor.

Separate sheets of metal are placed underneath press feeder and delivery sections, but these are on top of the blocks with the flanges turned down beneath the wood blocks. Similar sheets are placed under lighter units such as job presses and smaller bindery machines. All sheets are securely anchored to the blocks with flush-head screws. Both sheets and pans are easily put down while the machines are being installed or just before moving.

Cost of the sheets for the small units is $25 or less with cost of the larger pans ranging from $75 to $150, plus the actual cost of installation by maintenance crews. Use of the sheets and pans adds to the neat and clean appearances of the department.

Another innovation in this plant is the use of lead footings under the presses. Rubber blocks were tried on at least one press, but there immediately developed sufficient play from vibration to almost pull the feeder section and press apart before the blocks could be removed. Wood box forms were then built. Molten metal (most of it consisting of reclaimed metal, type slugs and scraps) was poured in to form solid footings between the press base and the concrete floor. Heavy oak timbers are used under smaller machines with bolts through the press frames. The base timbers are sunk and leaded in the concrete.

All electrical power conduits are overhead and leads to individual motors are down nearest concrete columns through conduits sunk in the wood blocks to the motor.

All smaller machines were lifted and moved with floor power trucks without difficulty. Larger machines were moved on rollers either with pulley traction from concrete columns or being pulled by floor power trucks.

In the job of moving, each unit was out of operation only for a short time.

Scanner

Employed to Produce Plates for Four-Color Newspaper Ad

A MILESTONE in transportation advertising was recently made by Eastern Airlines when its double spread, four-color ad appeared in a Sunday issue of the Chicago *Tribune*. The ad it is said, marked the first time that any transportation company has run a four-color double truck newspaper ad. Another first, in newspaper advertising, was the method used to produce the plates. It employed an electronic scanner to make the color separation negatives.

The mechanics of making newspaper color plates differ from those of making magazine plates because of the method in which newspapers are printed. This is primarily true because the newspaper plates are moulded from a mat and cast stereotypes are made, thus presenting registration problems that do not exist where electrotypes are used. Soft packing on the press and the fact that makeready cannot be used make it necessary that the newspaper plates be made to eliminate as many of the known hazards as possible.

The plates should be made so that each of the four plates have practically the same amount of molding surface and the condition of one plate will be identical with the other three. In other words, if the black plate has several lines of type and one of the other plates has only one line of type, all type should appear in each of the four plates. If that is impossible, then all dead metal should be left in and tinted to approximate the same amount of pressure on all four plates.

One of the biggest hazards of newspaper plates is the depth. Depth is not what the depthometer will show—it is the distance from the surface of the dot to the first shoulder. Normally that is about 0.001 in. to 0.0015 in. below the surface of the dot. It is common practice to powder the plates and etch to carry this depth down to 0.006 in., 0.007 in. and 0.008 in. depth. This depth is a false depth. The ink roller starts building up ink at the first shoulder.

In making the color plates for Eastern Airlines, all of these things were considered carefully and it was at this point that it was decided to bring the scanner into the picture, primarily to get an etch which was not a powder-bite etch, but one which was etched by temperature controlled tray etching.

The material for this job was art and not Kodachrome and could not be placed on the scanner. It was necessary to make a conversion or get a color transparency. Ektachrome was considered, but it was felt that the subtle tones which the Ektachrome captures were not desirable for newspaper reproduction. Ektacolor, however, has the tendency to give you a transparency with fewer tone values but richer and more intense values.

The art work was then converted by making an Ektacolor negative and positive, giving a transparency rich in color but reproduced in fewer tone values which meet the specifications for newspaper reproduction. The transparency was then placed on the electronic scanner and a set of electronic color separation negatives made. By using perfect color separations, screen negatives were made which could be etched in the temperature controlled etching trays thus giving the proper depth without the use of the powder bite. From that point on, it was a simple matter to meet all the severe requirements of newspaper printing.

Frank L. Aikens, 59, Sales Representative for Harris-Seybold Co.'s Central District, died December 3 at his home in Cleveland. Before Mr. Aikens joined the Harris-Seybold organization in 1945, he was for many years a salesman for various printing plants in Ohio. He was a member of the Cleveland Litho Club and the Cleveland Club of Printing House Craftsmen. Burial was in Barnard, Vt., where Mr. Aikens was born.

Equipment & Supplies

If you wish additional information concerning equipment, supplies and/or technical literature, please make your request to PRINTING EQUIPMENT *Engineer*, 1276 West Third St., Cleveland 13, Ohio.

When writing to us about any of the items described, and to save your time, just mention in your request the PEE symbol which appears at the end of each description.

Dust Collector

A SELF-CONTAINED unit type collector which draws the dust laden air away from its source, cleans the air and recirculates it to the working space, has been developed by the Aget-Detroit Co. Known as the Dustbuster, one of the devices has been connected to a DoAll Pica Master Saw in the engraving department of the Grit Publishing Co., Williamsport, Pa.

A dust collector, designed by Aget-Detroit Co., connected to a DoAll Pica Master Saw in the engraving department of the Grit Publishing Co., Williamsport, Pa. Called Dustbuster, the device draws the dust laden air away from its source, cleans the air and recirculates it to the working space.

The installation consists of connecting a single length of flexible hose to the dust discharge of the saw and to the inlet sleeve of the collector. The Dustbuster's motor is connected to the starting circuit of the saw, so that the saw and collector are on and off simultaneously.

To provide sufficient storage for the dust, a caster-mounted galvanized trash can receives the heavier dusts directly from the fan. The fine dusts from a band sawing operation rise to the upper portion of the Dustbuster where a cloth filter area stops the dust so that it will fall into the main dust collector when the filter bag is shaken. The cleaned air is returned to the working space.

Suction is rated at 600 c.f.m. on the Dustbuster and its storage capacity is 31 gal. The floor space required is 24 in. by 26 in. It is equipped with a ½ h.p. motor for operation on either 110 v., single phase, or 220 or 440 v., three phase, 60 cy., a.c. If more information is desired, please mention PEE No. 259 when writing *Printing Equipment Engineer*.

Press Operation Booklet

A REVIEW of general principles and practical instructions for maintaining and operating offset presses in the 17 in. by 22 in. and 21 in. by 28 in. sizes are included in the contents of a 32 page booklet recently published by the Harris-Seybold Co. Entitled *Operating a Small Offset Press*, the pocket-sized booklet is based on a series of four articles which recently appeared in *Harris Impressions*, Harris - Seybold's bi - monthly publication. Although the information deals specifically with small Harris presses, the general principles can be applied to most offset presses. Lubrication, loading of stock, plate installation, cylinder packing and roller setting are among the topics included in the booklet. Photographs and line drawings used in the booklet illustrate important parts of the press, while original cartoons emphasize noteworthy points in the text. The booklet is authored by Roy Barnes, Harris-Seybold's field training supervisor and special service representative. When requesting copies, please mention PEE No. 258 in your letter.

Photographic Film Base

A TRANSPARENT synthetic base for photographic film which, it is claimed, will retain its original dimensions and properties over a wide range of atmospheric conditions has been developed by E. I. Du Pont de Nemours and Co., Inc. The new material, technically known as a Polyester, is chemically related to Dacron Polyester fiber, the newest of the company's synthetic textile fibers. It is classed as a safety film base.

Sponsor states dimensional stability of the base offers advantages to the Graphic Arts industry where close tolerances are essential. Another claim made for the base is its lack of brittleness at low temperatures.

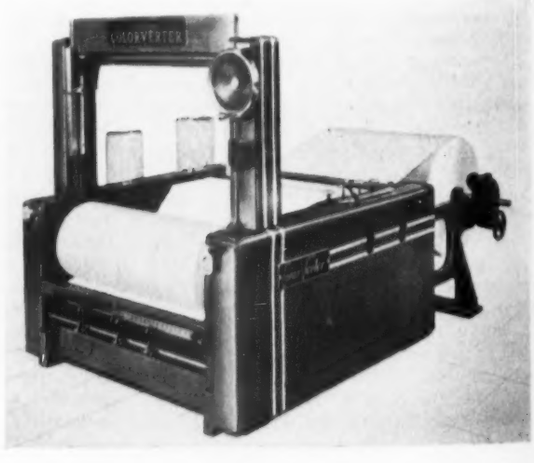
Five years of research and an investment of more than $1.25 million have already gone into the development of the film base, the company said. It emphasizes that the decision as to large-scale production will await results of the evaluation tests.

Improved Dutro ColorVerter

WHITE rolls of paper up to 34 in. wide can be made the same color on both sides or a different color each side on the Model 34 Dutro ColorVerter, announced by Puglisi-Dutro, Inc. Sponsor states the machine can slit up to 34 in. diam. rolls in the desired width and can produce the full range of regular colors as well as unusual colors.

The original Model 32 ColorVerter was a product of Orville Dutro & Son, Inc. Upon this company's decision to confine production to printing presses, Puglisi-Dutro, Inc., acquired the designs which were re-engineered to produce the Model 34.

Improvements in the machine are listed as a larger roll brake, Alemite centralized oiling system, standard glass bottle color feeders, stainless steel receptacles and color trays, individual coloring roll adjustments, and toggle and lever throwoff. Also paper gliders for easy threading, paper equalizers, and front roll slitting with a scale for locating the slitters. Please mention PEE No. 267 when writing *Printing Equipment Engineer* for more information.



The Model 34 Dutro ColorVerter for coloring white rolls of paper up to 34 in. wide. Paper can be stained the same color on both sides or a different color on each side.

Acid Safety Goggle—Duo-Chem is an acid safety goggle designed to protect the wearer from chemical splashes and dusts, according to United States Safety Service Co. The one-piece lens is made of a vinyl acid resistant optical plastic which, it is claimed, will not stain or discolor from acid fumes, vapors or splashes. A bright yellow vinyl frame, the American Standards Assoc. color code for acids, affords visual indentification of it as an acid goggle. This frame, reports sponsor, is soft enough to mold in a tight seal to facial contours and has maximum resistance to acids and alkalis. Metal hoods over screen vents are designed for ventilation. Weight of the goggle, which will fit over personal glasses, is a little over 1 oz. When writing for more details, please mention PEE No. 254.

Press Control Instrument

A PHOTO ELECTRIC measuring and control instrument adaptable to the printing and offset industries for automatic press control, has been developed by Instrument Development Laboratories, Inc. Designated the Colorede, the light comparator is applicable to automatic process control by means of light measurement.

Colorede is designed as an assembly of sealed building block units, arranged to fit particular measuring purposes. In most applications, the electronic unit, photocell unit, flicker unit and Servo-slit unit are used in standard form. The beam-splitter and illuminator units may be one of several standard arrangements or assemblies, designed for specific uses.

Part of the installation design for a Colorede control system includes devices to actuate alarm systems in case of operational failure on critical service. Sponsor claims the instrument will operate for thousands of hours without zero or sensitivity drift. The company states that I.D.L. and associated engineers are available to work with Colorede users in adapting the instrument to each desired service. Please refer to PEE No. 252 when writing *Printing Equipment Engineer* for further details.

Acquires Trade Marks

THROUGH V. Giannone, Sales Mgr., Bauer Alphabets, Inc., announces that the following trade marks have been acquired by Bauer: Bauer—The Types of Today and Tomorrow, Futura, Beton, Cartoon, Corvinus, Corvinus Skyline and Legend. It has also been announced that Bauer Alphabets, Inc., is the only concern authorized to use these names.

Vibration Felt Bulletin

WESTSORB Felt Machine Pads are designed for absorbing vibration on presses, cutters, folders, stitchers and other printing equipment, according to a bulletin issued by Western Felt Works. Sponsor claims the felt machine mounts will not break down under repeated impact loads and are resistant to oils, grease and acids. An adhesive coating on top and bottom of each mount eliminates slipping of unit during and after installation. Westsorb felts are available in varying degrees of hardness and thickness for specific needs. When writing *Printing Equipment Engineer* for a copy of the bulletin, please mention PEE No. 257.

Printing Press Reels

KOHLER printing press reels for newspaper and magazine presses are illustrated and described in a two-color, four page bulletin issued by Dilts Machine Works. The bulletin also contains information on paper roll dollies, transfer tables, turntables and trackage. In addition, diagrams are included of typical Kohler reel arrangements with integral printing press substructure and for a two deck magazine press. A typical track plan for a 10 unit newspaper press is presented, as well. Copies are available by mentioning PEE No. 265 in your request.

Doyle Infrared Proof Dryer

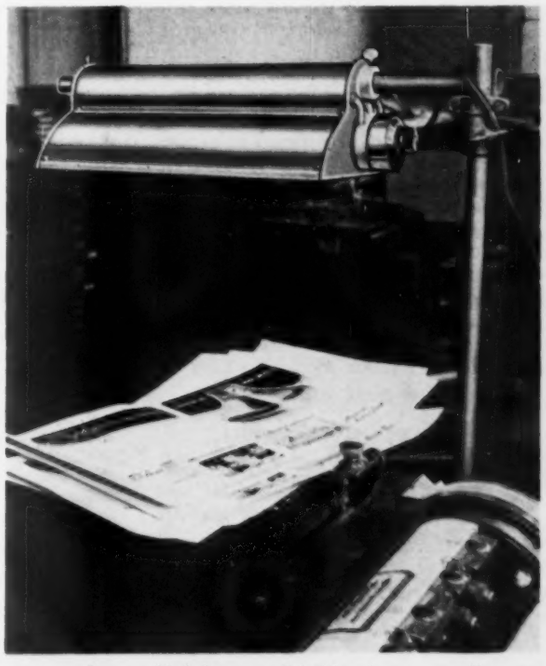
THE Doyle Open-Glow Infrared Proof Dryer is suitable for drying proofs of all kinds quickly, especially where quantity is involved. These include ordinary, reproduction and color proofs in composing rooms and photoengraving plants. In the latter case, the open glow coils are said to possess the property of providing a surface temperature for drying or setting the wet ink without affecting moisture content of the paper so that color register is not changed in any way. The dryers are furnished in complete portable and adjustable units or they may be supplied with sufficient parts to suit a particular application in fixed position on proof press delivery table, near the proof press or composing room table (such as a makeup table) with steel or iron top working surface.

The portable and adjustable floor model consists of a vertical telescoping floor standard or pedestal mounted on a heavy non-tipping metal base with roller casters to permit movement about the floor. At the top of the vertical standard is a 36 in. right-angle or horizontal arm upon which the reflector containing the drying coils is adjustably mounted. Reflector size is 18 in. by 9 in. Underneath the reflector containing the drying coils is 12 in. by 18 in. adjustable aluminum drying shelf or table upon which the proofs are laid.

Both the reflector and the proof drying shelf or table are adjustable in relation to each other. Distance from the floor of the reflector containing the drying coils is adjustable from 30 in. to 60 in. The heating elements in the reflector may be raised, lowered, tipped or swung. The aluminum proof drying table may also be raised or lowered to desired drying distance from the coils.

A three-heat switch is affixed to the 18 in. by 9 in. reflector housing for regulating supply of current to the heating elements or coils. A cord and plug is furnished for attachment to electrical outlet. Capacity of the coils is 3300 w. on full high heat, and half or less on medium or low heats; 15 amp. on 220 v., and 30 amp. on 110 v. Other size reflectors available.

An automatic time switch may be set for predetermined heating (drying) time and will automatically turn off the heat at set time. The switch may also be used manually in connection with a pilot light. Further information may be obtained by mentioning PEE No. 239 in your request.



View of Doyle Infrared Proof Dryer on its portable floor pedestal set near proof press for drying plain typographic, reproduction or photoengraver's plain or color proofs. Dryer may be obtained for fastening in any fixed location.

Exposure Frame Unit

COLWELL Litho Products, Inc., has announced the development of the Model B CoLight exposure frame unit for processing pre-sensitized offset plates. Exposure area of the unit is 12½ in. by 18 in. The CoLight is also designed

The CoLight exposure frame unit for processing pre-sensitized offset plates up to 12½ in. by 18 in. Part of the latticed directional glass has been cut-away (top) to show the blacklight tubes and a section of it blown up to show how it performs the function of preventing admission of cross-rays of light.

to handle albumen plates, silverprints, blueprints and mechanical negatives for typed or stylused work.

Sponsor claims that within 5 min. an operator using a CoLight can expose and develop a pre-sensitized plate, attach it to the press and have the job running. The Model B is equipped with a bank of five 15 w. blacklight tubes and a pneumatic contact pillow to provide pressure between plate and negative. The device features a latticed directional glass which is said to prevent admission of cross-rays of light and thus eliminate undercutting or dot spread on halftone work.

The CoLight is constructed of heavy gauge sheet metal and measures 20 in. by 18 in. by 8 in. Its weight is approx. 40 lbs. More information may be obtained by writing *Printing Equipment Engineer* and mentioning PEE No. 253.

Linotype Corona Booklet

CORONA is a Linotype face designed for setting classified, financial and news copy on newspapers and for catalog, book, general composition and job work in the commercial printing plant, according to a 20 page booklet prepared on the type face by Mergenthaler Linotype Co. Its contents include specimens of Corona set in various sizes showing the uses of the face as listed above. Linotype Corona is available in 10 sizes, from 5 pt. to 12 pt., with italic and small caps, and in seven sizes, from 5½ pt. to 10 pt., with Bold Face No. 2. It can also be obtained in 11 sizes, from 5 pt. to 14 pt., with Erbar Bold. A section of the booklet is devoted to a comparison of sizes of the type family. According to MLCo., Corona minimizes effect of shrinkage in dry mat making, thus providing larger letters for comfortable reading. A copy of this booklet may be obtained by writing *Printing Equipment Engineer* and mentioning PEE No. 256.

Offset Plate Desensitizer

DESIGNED for processing MMM sensitized aluminum photo offset plates for short runs of up to 5000 copies, is a plate desensitizer announced by Minnesota Mining & Mfg. Co. Designated MMM Rapid Desensitizer, sponsor claims it permits photo-offset printers to process such plates in a matter of seconds. The desensitizer, a thin, colorless liquid, is applied with a soft sponge and flushed off with fountain solution on the press. It is reported the invisible image picks up ink rapidly, becoming visible once the press is in operation. More information is available by mentioning PEE No. 260 in your request.

Ad-Art Book No. 1

WILLIAM Desmond Ryan, President of Mail-Ad Co. has announced publication of Ad-Art Book No. 1. The book contains 620 illustrations suitable for use in preparing copy for use by advertising agencies, newspaper and magazine publishers, direct mail concerns, house organs, department store advertising managers, advertising salesmen, offset and letterpress printers, letter shops, school publications and artists. The book trims 6 in. by 9 in. on 70 lb. coated enamel stock. The 64 pages are printed on side of sheet only to permit clipping.

Desmond states a modern, sophisticated advertising art technique has been used in all illustrations. It is contemplated that each illustration is adaptable with 50 to 100 different art uses.

This is the first of a series of Ad-Art books. Each book will be called by the artist's name. Ad-Art Book No. 1 was drawn by Bob Sandmeyer, who is on Mail-Ad art staff.

Unrestricted use of the illustrations is given with each book.

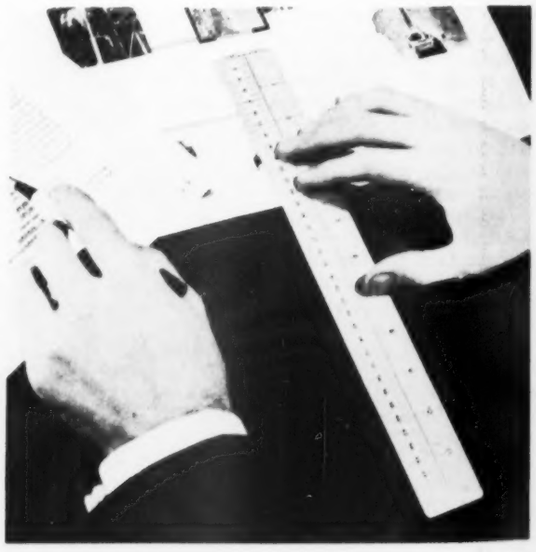
Mail-Ad Book No. 1 sells for $5 and carries with it a 10 day money back guarantee, or may be sent out for a free trial offer of 10 days. Order direct from William Desmond Ryan, President, Mail-Ad Co., Suite 13, 6238 Wilshire Blvd., Los Angeles 48.

Sterling Toggle System

THE Printing Machinery Co. has issued a 16 page booklet titled *Profitable Letterpress Printing* in which is graphically explained the benefits in a metal mounting base system. Included are three typical jobs that were formerly printed from type and wood mounted cuts and then printed on Sterling Toggle Base. The time consumed for each operation following both methods is listed, as well as the percentage of time saved by one method over the other. In addition, information is presented concerning Magnesium Sterling Toggle Base. Illustrations and details are also included of accessories available with the Sterling Toggle System. When requesting a copy of this booklet, please mention PEE No. 262.

Hand Lift Trucks

INFORMATION on the current models of Barrett single stroke hand lift trucks has been compiled in Bulletin No. 5110 released by Barrett-Cravens Co. Complete specifications are included for the models shown, which have capacities up to 4000 lbs and can be lifted with a single stroke of the handle. Illustrations have been used to show the mechanical features of the Barrett trucks. The two-color, eight page bulletin may be obtained by mentioning PEE No. 264 when writing *Printing Equipment Engineer*.



Conversion Ruler — A ruler made of Vinylite plastic rigid sheet which visibly permits conversion of inches to picas is designed for use by printers, engravers, layout, production and makeup men, editors and commercial artists. Available from The John Warner Co., it is claimed the Vinylite plastic rigid sheet keeps each scale reading accurate under any temperature, moisture or weather condition. The ruler can be wiped with a damp sponge for removing finger smudges and ink stains without affecting the scales, reports sponsor. It is also claimed that the Vinylite plastic resists oil, grease, alcohols, warping and most inorganic chemicals. One scale of the 12 in. ruler (illustrated here) is supplied with matched pica and inch scales numbered and calibrated on the edges and again at the center where one scale can be read against the other. On the reverse side are six additional scales that provide a gauge for type sizes from agate to 16 pt. If further information is desired, please mention PEE No. 255 in your request.

Two New Models of Densitometers

TWO new Photoelectric Densitometers have been announced by Photovolt Corporation. The first of these is a Transmission Densitometer and the second is a Reflection Densitometer. These instruments are designed mainly for the Graphic Arts industry. A 20 page technical information folder, in which these instruments are described, is available gratis from the manufacturer.

As is shown in Figs. 1 and 2, each of the Densitometers is comprised of two units, the right hand unit, in both cases, being the Electronic Spot-Photometer Model 501-A. This instrument is equipped with a search head that is connected to the instrument proper by a flexible cable with plug connection. When the search head is attached to the Transmission Density Unit (left side in Fig. 1) this combination constitutes the Transmission Densitometer. If the search head is connected to the Reflection Density Unit (left side in Fig. 2) the combination represents the Reflection Densitometer. If both transmission and reflection density measurements are desired, one Photometer can be used for both purposes.

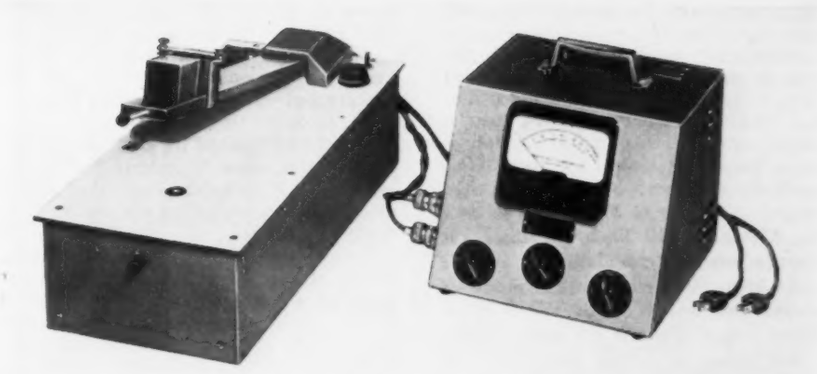


Fig. 1.—View of Photovolt Photoelectric Transmission Densitometer for use by photoengravers, offset and gravure platemakers. At right is Electronic Spot-Photometer and at left can be seen the Transmission Density Unit. Both units are connected by plug-in wire. Instrument operates on 100-125 v., a.c., 60 cy.

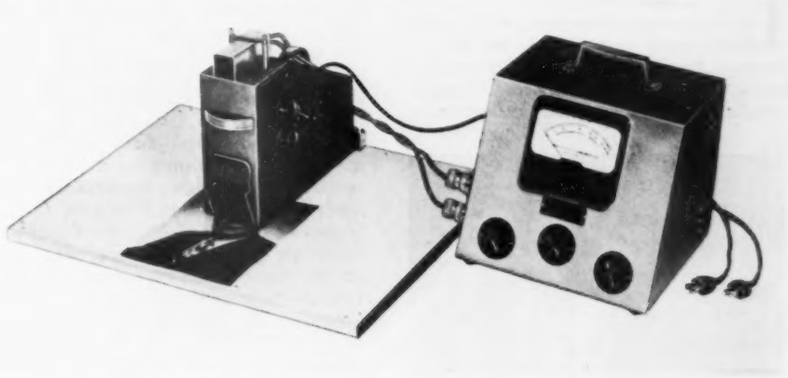


Fig. 2.—View of Photovolt Photoelectric Reflection Densitometer. At right is Electronic Spot-Photometer (same as that shown in Fig. 1). For use in measuring reflection density of photographic prints and of illustrations produced by letterpress, offset and gravure printing processes. It is particularly useful for tone control in printing presswork. It also permits color analysis on small areas of color reproductions.

Transmission Densitometer

Among the uses of the Transmission Densitometer are the following: (1) Measuring contact printing density of photographic negatives; (2) Determining density contrast; (3) Balancing color-separation negatives; (4) Color analysis on color transparencies; (5) Scanning image on camera ground glass; (6) Measuring density of continuous-tone and screened negatives as well as positive transparencies in photoengraving (which includes gravure), and (7) Measuring density of negatives and positive transparencies in albumen and deep-etch lithography.

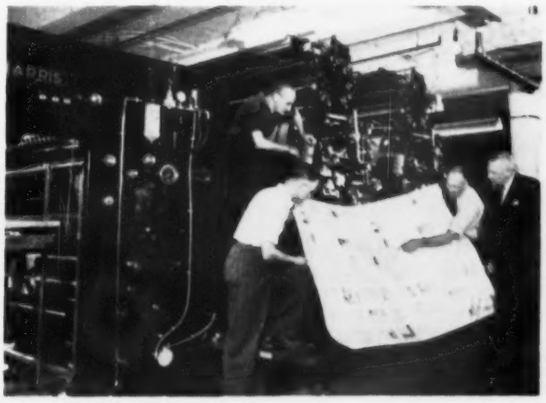
For transmission density tests, the plate or film is placed on the Transmission Density Unit, with the spot to be measured in registration with the light beam. Then, the swinging arm of the unit is depressed, and the needle of the Photometer will indicate the density directly. These readings are independent of individual judgment and are strictly reproducible from one operator to another. The instrument can be operated in a well-lighted room.

In discussing the value of the Transmission Densitometer, sponsor states one of the main shortcomings of visual tone estimates is that the human eye tends to be influenced by adjacent surfaces of contrasting shade. Photoelectric density readings, however, are not subject to errors of this kind. Also, they can be recorded and filed for future reference to serve as a guide in routine work, thus avoiding waste in labor and material by reducing the number of remakes on negatives or positives and by decreasing the retouching work of the correction artist.

Reflection Densitometer

The Reflection Densitometer (See Fig. 2) is designed for the measurement of reflection density of photographic prints and of illustrations produced by the letterpress, offset and gravure printing processes. It is particularly useful for tone control in printing presswork. It permits color analysis on small areas of color reproductions and of other materials with color patterns such as labels, wallpapers and textiles.

Among these specified uses of the Reflection Densitometer are the following: (1) Measurement of reflection density and color of photographic prints and reproductions or illustrations produced by any other color printing process; (2) Color analysis on materials having a pattern which requires the measurements to be taken on small areas; (3) Tone control and tone correction in the print-



Harris Press Installed in Canada—Copp Clark Ltd. of Toronto, Can., recently installed this Harris two-color 50 in. by 72 in. offset press. It will be used primarily to print textbooks in color, and also for the printing of road maps, display material, box wraps, greeting cards, calendars and general advertising material. Shown examining a press sheet from the press are, from left to right: Amby Mortlock, Plate Room Fm.; Alan Parkes, Litho Fm.; and Brigadier Alan M. Thomas, Vice Pres., all of Copp Clark. Pressman Albert Roberts, standing on the press, looks on. The Copp Clark plant is equipped for both offset and letterpress printing and approx. 75 per cent of the firm's textbook work is done by offset.

ing pressroom at the time of the actual press run.

Some time ago, with respect to the comparison of a still wet freshly printed form, a printing ink executive stated that the readings taken on wet ink can be absolutely duplicated at a later time when the ink is dry. The observations made by this executive, however, were related to the use of Photovolt's Reflection Meter No. 610. Photovolt states that the fundamental considerations are the same when the Reflection Densitometer is used. Instruments of this type in themselves cannot evaluate the color change which occurs in drying. But it will be mostly necessary to establish by actual tests what instrument readings are required on the wet ink to give the desired color effect on the dry sheet.

During the actual press run, the color may change in offset printing because of an excess of water, improper ink adjustment, incorrect pressure on the press, or growth or decrease of the dots. Since the readings will show the color change immediately, it will be possible to take measures to restore proper operating conditions for the run.

Color analysis requires the reflectance of the surface to be measured within specified spectral bands. Suitable color filters are available as accessories. In practical work, it will be possible to specify the color satisfactorily by readings with three filters, one red, one green, and one blue. A white enamel plaque is available to serve as a working standard in color measurements.

The Densitometers operate directly from the AC power line and are fully stabilized against voltage variations by built-in constant voltage transformers. The Photometer Model 501-A can be used separately for such applications as determination of exposure time in enlarging by light measurements on the baseboard, measurement on uniformity of light distribution on copying boards, contact printers, baseboards of enlargers, and ground glass of cameras.

Complete information about this equipment may be obtained by mentioning PEE No. 261 when you send your request to *Printing Equipment Engineer*.

Trucks Work in Pairs

TWO trucks, designed to work as a team in aisles less than 6 ft. wide, have been announced by Lewis-Shepard Products, Inc. The illustration below shows a unit load being brought to the aisle by a Lewis-Shepard Hydraulic

Pallet Truck while its teammate, the L-S JackStacker, transfers and tiers the load.

The JackStacker tiering trucks are designed with capacities up to 6000 lbs., both telescopic and non-telescopic. (A description of the 1000 lb. capacity JackStacker appeared in the November, 1951, issue of *Printing Equipment Engineer*.)

The Hydraulic Pallet Trucks are designed with capacities up to 6000 lbs. and with multiple stroke hydraulic foot lift to 4 in. Sponsor states the constant wheel base eliminates any swing in the truck while being raised or lowered. More details may be obtained if you will mention PEE No. 266 in your request.

Photocopying Machine

THE Auto-Stat Photocopying machine, announced by the American Photocopy Equipment Co., is designed to produce dry photocopies of drawings, layouts, papers, documents or originals, printed on one or both sides or on opaque or translucent paper. The unit can handle letter and legal size copies as well as larger copies up to 11 in. by 17 in. Sponsor claims that minimum production speed for the machine is 100 copies per hr. and a finished copy can be made in less than 30 sec.

Designed for table top operation, the stainless steel machine measures 21 in. long by 8 in. wide by 5 in. high. The Auto-Stat operates on a transfer facsimile principle that employs two different types of paper—a No. 1 sheet sensitive to light and a No. 2 sheet not sensitive to light.

In the two-step process of making an Auto-Stat copy, the original to be copied is placed face to face with the No. 1 Auto-Stat sensitized sheet and inserted in the contact printer for a 10 sec. exposure to light. Next, the exposed No. 1 sheet is placed in face to face contact with the No. 2 Auto-Stat sheet and both sheets are inserted in the slots at the front of the Auto-Stat processing unit. The two sheets travel through the machine automatically and emerge from the delivery slot adherred together. By peeling the two sheets apart, a positive reproduction of the original is obtained on the No. 2 Auto-Stat sheet. More information may be obtained by mentioning PEE No. 276 in your request.

Electrical Safety Rules

WORK on electrical circuits and apparatus of any kind, in some cases, is hazardous, due to accidents which have occurred, usually resulting in lost time, partial or permanent disability, and some times death. To aid in the correction of this hazard, Westinghouse Electric Corp. has prepared a 16 page booklet entitled *Safety Rules for Electrical Maintenance and Construction Men*. Among its contents are safety methods required in electrical construction and installation, precautions necessary before starting work on or close to live lectrical circuits or apparatus, working about motors, etc. Please mention PEE No. 263 in your letter when requesting a copy of this booklet.

Fast Setting Cement

POR-ROK Quick Setting Cement is designed for setting anchor bolts in concrete to which machinery or equipment may be permanently fastened, according to the Hallemite Mfg. Co. It may also be used for repairing concrete floors. Sponsor claims that Por-Rok sets permanently within 30 min. It is further claimed that the pourable cement is self-bonding, self-leveling, oil resistant and will not shrink. Hallemite states that according to laboratory tests, the material has compression strength of 4500 lbs. p.s.i. Por-Rok is applied by first mixing with water and pouring into the area desired. Additional information is available by mentioning PEE No. 248 in your request.

Offers Plastic Engravings

QUESTIONS and answers and other pertinent information concerning Fairchild plastic engravings comprise two bulletins issued by the Basil L. Smith System. Using Fairchild Scan-A-Graver equipment in 85, 100 and 120 line screens, the sponsor plans to specialize in supplying publications and printers who handle catalog, publication and school annual work with the plastic cuts. Some of the material covered in the bulletins includes making mats from plastic originals, outlining, mortising, how copy is submitted, line drawings, etching depth, durability, cropping, advantages to the printer, etc. A price list is also included, as well as several illustrations of plastic engravings printed on coated stock. Readers may write *Printing Equipment Engineer* for a copy of these bulletins. Please mention PEE No. 250 in your request.

Ink Specimen Book

SPECIMENS of *Off the Shelf* printing inks are shown in a pocket size book recently issued by the Sigmund Ullman Co., Div. of Sun Chemical Corp. The book includes one-page specimens of 35 standard colors and 20 standard tints, printed in a solid and screen values. Formulas for both opaque and transparent tints are listed in the standard tints section. According to the sponsor, these inks are developed for use on Miehle Verticals and Horizontals, Kellys, Millers and other automatic presses. Copies of the specimen book are available by mentioning PEE No. 268 in your request.

Many of our production executive readers will respond to your Position Wanted Ad in the Classified Section of *Printing Equipment Engineer*. Rates on p. 75.

The ABC of OFFSET

For Letterpress Printers

By George Jos. Lenzer

Series Two

II—COPY HOLDERS

SINCE a facsimile reproduction of an original piece of art work is dependent upon the original copy itself, its character, nature of execution, pigmentation, size, opacity or transparency and the kind or nature of illumination required to bring out the most essential details, it becomes evident that one particular style of copy holder will not serve or meet all of the necessary requirements. One that will be ideal for holding a large oil painting on framed canvas will not serve or accommodate efficiently a round fruit cake box, much less a Kodachrome transparency.

By the same token, daylight illumination as used for the oil painting will not suffice for the colored transparency.

Many copy holders are commercially produced and sold to the trade, but in the main, most copy holders are custom built to meet certain specific needs and to conform to the financial ability to build or purchase.

To this end, then, we will devote this discussion to the copyboard or copy holder, its construction, use and purpose.

The Easel Type

The artist's easel is the oldest type of copy holder extant. It is the most generally used in all branches of the lithographic art reproduction field. It will accommodate in most instances any form of original art work and sketches whether they be oil paintings, water color renditions or photographic prints.

In Figs. 1A and 1B are illustrated the adaptability of the easel to copy of any size or plane dimensional shape.

The Type A Studio Easel is so designed that copy may be held vertically or with a slight tilt. Generally of wood construction, the base and standard are rigid or stationary. The upright support (to which the copy holding base is attached) is hollow, permitting a telescopic adjustment of the movable parts of the Easel, which may be extended to varying heights. Matching holes are drilled through the upright support and the movable upright section. A removable pin is used to hold the telescoping part at any selected extension.

The top clamping device is attached to a free moving and telescopic extension. This telescopic assembly is fastened to the back side of movable upright section of the easel and may be locked into position by a set screw.

An easel of this type will hold securely and rigidly most any kind of copy submitted for reproduction. If the furnished copy is too small in dimension to be accommodated by the easel, then an auxiliary panel of plyboard or any other kind of support to which the copy may be attached, can be utilized.

Mobility of the entire unit is afforded by casters or rollers which are attached to the easel standard base.

In Fig. 1B, Type B copy holding easel is illustrated. This is the simplest and most common kind of copy holding

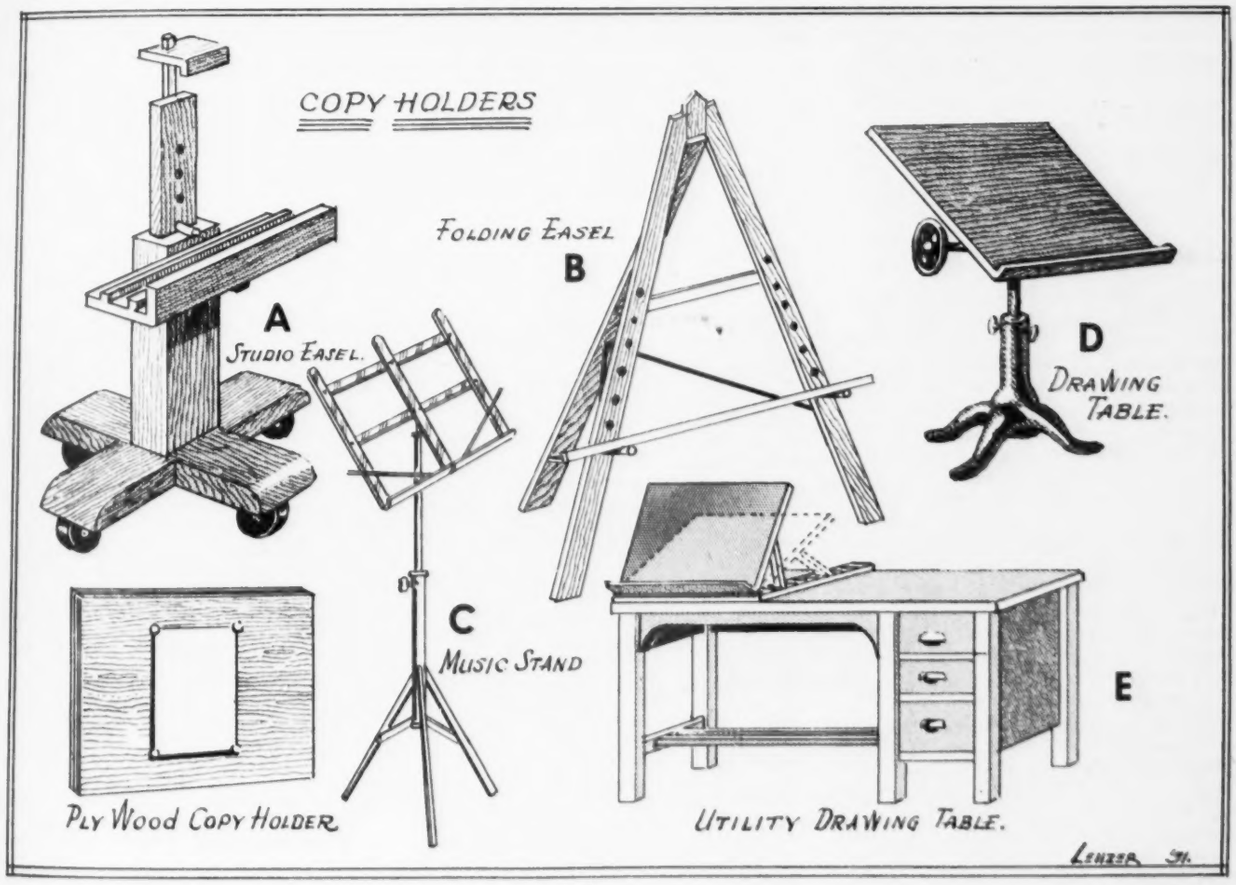


Fig. 1.

easel. This style of folding and portable easel is also of wood construction and is of a self supporting tripod design.

When this easel is set up (Fig. 1B) and locked into position, the hinged outer legs with their cross braces take the form of a capital A. The hinged middle or central leg of the assembly is the supporting element, and is attached to the two outer legs by means of a V type rod extension or a light chain.

The two outer legs are provided with equally spaced drilled holes which accommodate two removable wooden pegs.

To hold the copy, a removable base board is provided, which in use is laid across the two wooden pegs and against the two supporting legs.

Adjustment of the copy holding device to different levels is accomplished by moving or shifting the two removable pegs to similarly spaced parallel holes in the two outer legs of the easel, then laying the copy holding support in place.

This type of easel does not provide the rigidity or strength found in the studio type easel (Fig. 1A). Its best advantage in construction is that when not in use it can be folded into a compact unit and can be stored in a corner of a room or closet.

Another disadvantage of this kind of easel is the ease with which the removable parts are lost or mislaid, thus rendering the easel useless.

The Music Stand

Where copy is consistently small in dimension, a telescopic and folding music stand (Fig. 1C) serves as an ideal copy holder. It will conveniently accommodate flat, light weight copy. The tilt-top holder is or can be fitted with spring type clamping devices which will hold the copy firmly if not rigidly.

The supporting legs are hinged to the telescopic upright and are easily locked into standing position by means of a spring-type locking lever.

Three snug fitting pieces of metal tubing make up the telescopic adjustable upright element of the assembly. The nesting or enclosing section of the telescopic element is fastened to the folding legs of the stand by means of socket joint sliding hinges. A set screw is provided by which the sliding central extension tube is locked when extended. The third telescoping section is fitted with a holding device to accommodate the attachment for affixing the tilt-top copy holding device.

The tilt-top holding device with its self contained affixing attachment is collapsible and can be easily folded.

Advantages in the use of the music stand are its light weight, ease of assembly, adjustability to varying heights, easily collapsed and folded, and can be stored in a desk drawer when not in use.

Its greatest disadvantage is the lack of weight and rigidity. The slightest touch or bump in the right place will cause it to topple over, resulting in possible irreparable damage to the copy it is holding.

Tilt-Top Adjustable Drawing Tables

For greater utility in the Process department, a tilt-top drawing table (Fig. 1D) is an ideal copy holding device.

The base and standard of the drawing table illustrated is of cast iron construction, affording stable rigidity to the entire assembly. The hollow upright standard accommodates the snug fitting adjustable telescoping element which is also composed of iron tubing. When extended to the desired height, the telescoping section is securely locked into position by means of one or two properly spaced and situated set screws.

The tilt-top movable and adjustable element is permanently attached to the telescoping iron tube. This adjustable head is assembled on the ball and socket principle, which affords a swivel tilt quality and a rotating action. By reason of this type of construction, the table top, which is attached to the tilt-top head, can be raised to an almost vertical position or it can be lowered to any desirable level.

In addition, when not serving as a copy holder, the drawing table can be utilized by the artist for copy preparation, sheet layout and creative art production.

General Utility Drawing Table

Affording many advantages to the department is the illustrated general utility drawing table (Fig. 1E). Its tilt-top and adjustable drawing board will serve as a copy holder.

This roomy piece of furniture can be used as a foreman's desk, inspection table and drawing table for the creative artist or process operator.

If necessary, the flat table top can be replaced with a flashed opal glass top. With a light box attached underneath, this table can be converted into a flat topped layout or striping table in addition to its other uses.

Other refinements can be added to this piece of equipment which can convert it into an invaluable self contained unit. How this can be accomplished will be explained in a future installment dealing with work tables.

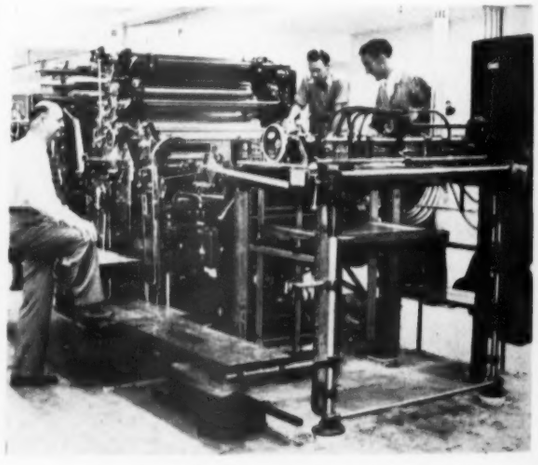
It will be noted that this chapter has been devoted to holding devices for opaque copy only. Copy holders for transparencies, because of their nature and pigmentation, will be treated separately in our next discussion.

(*To be Continued*)

Mid-Atlantic Conference

This year's PNPA-NJPA Mid-Atlantic Newspaper Mechanical Conference, slated for March 20-22 at the Bellevue-Stratford Hotel, Philadelphia, will stress greater efficiency and lower production costs in its technical sessions. Theodore A. Serrill, General Mgr. of PNPA, and Lloyd P. Burns, Executive Secy. of NJPA, have been working with the conference committee in presenting a program that will be of interest to the smaller-city dailies and weeklies, as well as to the larger newspapers. Herbert G. Taylor, Mechanical Supt., Bethlehem (Pa.) *Globe-Times*, is Chairman of the Mechanical Committee; and J. P. Grant, Mechanical Supt., Philadelphia *Bulletin*, is Vice Chairman.

Equipment and supply companies who have already reserved display booths for the Conference are: Alico, Inc.; Bingham Brothers; Composing Room, Inc.; Federated Metals Div., American Smelting & Refining Co.; Godfrey Roller Co.; Heidelberg Eastern Sales Co.; Imperial Type Metal Co.; Lanston Monotype Co.; Linotype Parts Co.; Master Etching Machine Co.; Matrix Contrast Corp.; Nolan Corporation; Phillips & Jacobs, Inc.; Vulcan Rubber Products, Inc.; and Wesel Mfg. Co.



Installs ATF-Mann Press—Shown here is the ATF-Mann single color 25 in. by 36 in. offset press installed by American Type Founders at the Republic Press, Div. of the Republic Publishing Co., Yakima, Wash. The parent company prints the Yakima *Daily Republic*. Specifications of the press are as follows: Max. sheet size, 25½ in. by 36½ in.; min. sheet size, 17 in. by 22 in.; max. printing area, 24½ in. by 36 in.; max. speed, 5500 i.p.h.; stock range, onion skin to 0.032 in.; and floor space, 9½ ft. by 18½ ft. by 7 ft. 2 in. high. Light reflection has been increased in the interior of the press by the use of a bright yellow paint. The press is equipped with a built-in washup device. A micrometer cylinder setting device is used for regulating pressure to 0.001 in. between the blanket and impression cylinder. Pictured with the press are (left to right): Melvin Milstrom of ATF's Seattle Branch; Nelson Kerr, Republic pressman; and Jack Baker, George Mann Co., Ltd., manufacturers of the press.

These 33 journeymen commercial printing pressmen attended the intensive refresher course in presswork held recently in Charlotte, N.C. The course was sponsored by The Printing Industry of the Carolinas, Inc., of which Eugene H. Salmon is Executive Secretary. Craig R. Spicher, of Miehle Printing Press & Mfg. Co., was instructor. "Professor" Spicher is shown standing in left end of back row. Essentially, this was a cram course, but men came from various parts of the Carolinas. After adjournment, the class requested that the course be repeated.

Increased Production — Improved Quality

By EUGENE H. SALMON*

**Executive Secretary, The Printing Industry of The Carolinas, Inc., Columbia, S. C.*

INCREASED production—improved quality—How to get it? That's the question facing printers everywhere. In the Carolinas, one definite solution to this dual problem has been found in short, intensive courses of post-graduate instruction for journeymen in methods geared to today's fast pace.

The latest intensive course offered recently by The Printing Industry of the Carolinas was a Pressmen's School. Two days of concentrated study and instruction resulted in those attending having the essentials to carry out, in their regular work, the objective of the school—to produce a higher quality of printing and, at the same time, to increase the number of impressions per press per day.

The thinking behind this, and the other schools, may be of interest before going into details of the Pressmen's School. The overall problems were given careful analysis to arrive at an answer.

Why does one plant produce more and better printing than another plant with practically the same equipment and class of work? Given the same working conditions and the same equipment the answer is obvious. It is a difference in personnel.

The PICA officers realized that the best personnel for printers does not result from a hit or miss selection. Some men and women make excellent craftsmen, given proper training and sufficient experience. Others will never become even mediocre workmen.

Many of the people in the Carolinas had worked in only one printing plant. They knew nothing of operations in other plants. They did not know much they should have known—and they were not conscious of this lack of knowledge. There are precious few industries wherein the workers may be classified as scholars, and printing isn't one of them.

The idea of a series of schools was discussed. Bear in mind, please, that The Printing Industry of the Carolinas has members scattered over two states. Obviously, it wasn't possible to have an extended school. It had to be handled in a few days. The men couldn't be away from their work for long periods.

The first school was one the Graphic Arts Association of Washington, D. C., had successfully conducted in night sessions extending over a period of 15 weeks. When the able instructor, William Highberger, was asked if he could conduct this same course of study in Layout and Design in three days, he was uncertain. However, the experiment appealed to him and the school was held in Charlotte, N. C. Men and women came from over the two states and at the conclusion of the school were most enthusiastic. The following year, this same school was repeated, and again it was filled and the results were immediately apparent, as had been the case the previous year.

The Foreman Management Program was conducted during a three day period by J. M. Cunningham—and repeated. The results from this splendid school are beyond what one could reasonably expect.

This has been a long introduction for the fifth school—a "post-graduate course for pressmen." This was a school for which there was no material available as a text. Too much stress cannot be placed upon the importance of the right man to conduct these schools. They are essentially cram courses. They are hard work for both students and instructors. They must be kept interesting and they must produce results. The goal of the Pressmen's School was to teach better methods in the pressroom with the result that production would be increased to a point considerably beyond present production and that better quality would be obtained.

Craig R. Spicher of the Miehle Printing Press & Mfg. Co. was suggested by a number of men. Following correspondence with and work by Mr. Spicher, final details were completed. Mr. Spicher undertook the difficult assignment. He prepared text material especially for this school. He worked out a schedule of lessons. The school was held in Charlotte.

The introductory part of the course included personnel job analysis, careers in printing, importance of printing and printing recognition. Then followed printing fundamentals with general printing facts, typographic presswork, type composition, photoengraving, paper, ink rollers, binding, all supported by relating case histories.

Inasmuch as all pressmen in attendance were letterpress men, much study was devoted to halftone printing. A systematic method for judging halftone printing, with visual charts to demonstrate the how and why of all phases of halftone printing was covered.

The economic value of a printing press to the printer was thoroughly explained. Here the students gained an insight into press earning capacity; a comparison of press production formulas and used visual aids for the better understanding of cost and profit.

Special operations of the printing press were explained including die-cutting, embossing, imprinting, etc. Then came pressroom auxiliary equipment and pressroom gadgets. Pressroom operating materials, plate mounting and related subjects were next on the agenda. This is a very brief description of the subjects covered in the two full days. At the conclusion of the school certificates were awarded.

What are the results of the course? The practice was adopted at the first of the schools to ask students to write a brief summary of what they found of particular interest, what they learned or what they thought of the course. A study of these reports reveals a sincere desire on the part of the students to learn more about their jobs. It also shows men anxious to return to their work and try out the new ideas for improving the work of their plants.

Perhaps you would like to read a few excerpts from some of the reports to judge for yourself about this school. Without exception, they praised the excellent course of study prepared by Mr. Spicher and his method of presenting the information. Many of them voiced the same thought as J. H. Wierse, who wrote, "If we only had more schools more often it would help those who are trying to come up the hard way."

H. C. Reed said, "This course helped in making me quality-minded in halftone work and how to get more press production by pre-makeready."

"I picked up a lot of fine points about ink, paper and rollers which I didn't know before," wrote W. S. Patterson.

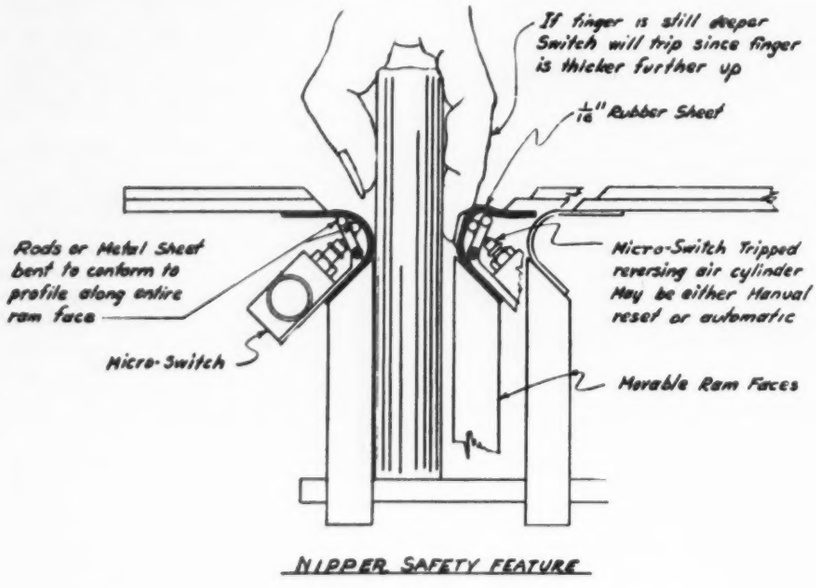
Henry L. Folsom observed, "I was particularly interested in the study of halftone printing . . . means to recognize and correct faults in halftone work without too much loss of time."

The report of one pressman indicates

the need for a school for top management. M. B. Jordan wrote, "In those cases where the plant management has failed to develop a set plan or system, it is then necessary for the individual pressman to have some system of his own. This is, or can be, the difference between an ordinary worker and a producer . . . In the modern trend for speed in the printing industry and the increased cost of idle press time, it seems to me that pre-makeready is a definite requirement in all plants."

This was a school for journeymen pressmen only. It was planned as a post-graduate course which makes the comment by Thomas W. House of particular interest. He said: "I have had 25 years experience in the pressroom and I can truthfully say some of the points brought up in this school have been a wonderful help to me . . . especially the plan for cooperation between the higher up boss and the men who run the presses."

The class organized itself on a permanent basis. The plan is for all of the students to reassemble to discuss the results accomplished as a result of the school. This was their idea—and a good one. A month after the school, the Class President Herman C. Reed wrote: "I am looking forward to PICA's next wonderful school of instruction."


If finger is still deeper Switch will trip since finger is thicker further up
1/16" Rubber Sheet
Rods or Metal Sheet bent to conform to profile along entire ram face
Micro-Switch Tripped reversing air cylinder May be either Manual reset or automatic
Micro-Switch
Movable Ram Faces

NIPPER SAFETY FEATURE

Nip Books — Not Fingers

By LILLIAN STEMP

UNDER average conditions, the nipper (book-back compressor), which is used to reduce the sewing swell of the backs of books, can be operated safely for as long as 30 years—perhaps there are records exceeding this figure. However, it is when the machine is altered or methods of operation are changed that physical injuries to operators may occur.

For example, the toggle arms and joint are protected by a housing furnished by the manufacturer. Yet there are many of these nippers being run in binderies with the toggle mechanism exposed. Long ago they were removed perhaps by someone working on the machine, or the machine might have been purchased second-hand and arrived at the new plant without the housing. Sometimes this omission is of such long duration that neither supervisors nor plant managers are aware that such housings exist.

The average method of operation of the nipper calls for a single operator to run the machine. The man usually inserts books into the continuously running jaws of the machine with his right hand, and removes them with his left hand every time the jaws open.

In binderies where the work method is changed, one or two helpers keep the operator supplied with books and one or two remove the books. In this instance the operator still inserts the books into the compressing jaws, but it is the helpers who remove them from the jaws. A certain rhythm of operation builds up and if the timing is broken, the helpers removing the books may get their fingers caught between the book and the jaws. This is more likely to occur on small books such a pocket-sized Bibles. One way to overcome the exposure is to insist that on orders calling for the compression of small books that only the operator be permitted to insert and remove them.

However, there are times when the operator's fingers may also get trapped in the jaws. To overcome both the hazard to the helpers and to the opertor, it has been recommended that some mechanical protection be provided. As far as is known, the only company to have developed a solution thus far is the R. R. Donnelley & Sons Co. who utilized a precision micro-switch as shown in the accompanying diagram.

Survey Reveals Executive Attitudes About Private Plants

JUST recently, J. W. Rockefeller, jr., and Associates, Consulting Engineers, New York, N. Y., reported the results of findings with respect to answers received through questionnaires mailed to a selected list of commercial printers.

In the composite return prepared from the questionnaires returned by the individual firms surveyed 85% believe the private printing plant has become a greater threat to the commercial plant during the past few years, but 15% replying do not agree. It is believed by 76% of those replying that improvements in printing equipment are necessary to combat this trend, while 24% think the improvements are not necessary. Among those who think printing equipment improvements are necessary, 28% believe such improvements should be capable of increasing production 20%; 60% believe production should be increased 50%, while 12% believe production should be increased 100%.

In the composite report assembled by the Rockefeller organization, 42% believe improvements should be made in composing machines; 34% in the pressroom and 24% want equipment improvements for the bindery.

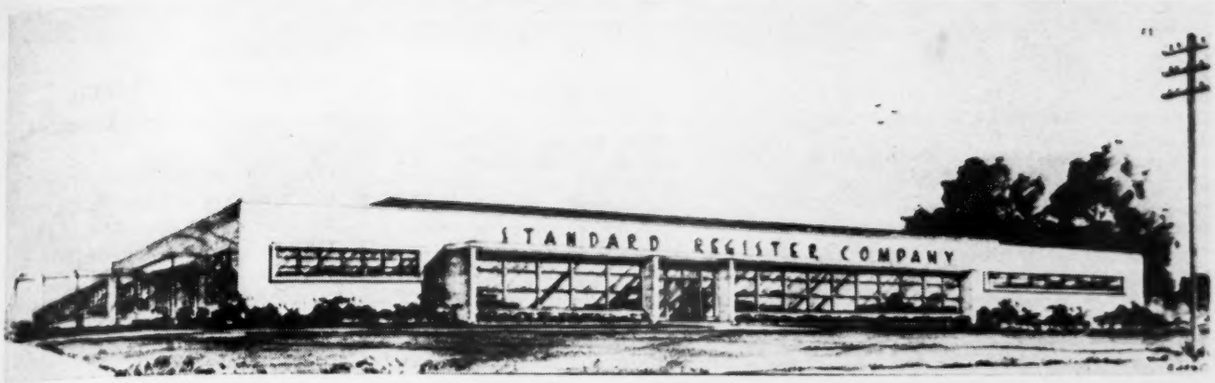
Improvement in Production

In the composing room, pressroom and bindery, those replying feel that the greatest need in production of equipment is summarized as follows: Typecasting machines 40½%; sheet-fed letterpresses, 48%; sheet-fed offset presses, 18%; folding machines, 12½%; stitchers, 21%; cutters, 11%.

With respect to automatic equipment those replying feel that the greatest need of equipment to take the place of hand labor is in the following operations: Materials handling, 22%; Flat sheet gathering (interleaving), 61%; hand feeding of equipment (stitchers, etc.), 42%; tipping, 13%; padding 20%.

Summary

Following are excerpts taken from the summary prepared by the Rockefeller organization after analyzing questionnaires returned from commercial printers. One category of printers argues that the sole reason for the existence of the private plant is its ignorance of costs. The opinion is expressed in the Rockefeller report



Standard Register Builds Plant in East—The Standard Register Co. of Dayton, O., is constructing a new plant in York, Pa., according to an announcement by M. A. Spayd, President. Spayd stated the York site was chosen for its geographical location in serving the concentrated Eastern markets. When completed, which is expected to be in the fall of this year, 250 to 300 people will be employed in the new Standard Register plant. He also said some personnel would be transferred from the company's Dayton plant to serve in supervisory capacities in York. The new one story building, the front of which is shown in the artist's sketch above, will be of brick, steel and masonry construction totaling 64,000 sq. ft. located on a 15 A. plot. Headquarters for Standard Register will remain in Dayton.

that this view is hardly justified by the facts. In many instances, the private plant possesses more up-to-date and efficient equipment than most commercial plants in the same geographical location. Secondly, a private plant almost invariably operates on a much lower overhead. Its selling cost is extremely low. . . . Other savings in overhead expenses enjoyed by the private plant (are) such items as estimating, credit controls, collection expenses and advertising. . . . Analysis of the facts hardly supports the contention that private plants exist solely because of their ignorance of costs.

"A second group of commercial printers," it is stated in the summary, "attributes the existence of the private plant to the fact that wages paid for identical work are considerably lower in such than in the commercial plant. Our experience in both private and commercial plants forces us to accept this explanation as at least one reason for the private plant's existence."

". . . small printing machines such as composing machines and offset presses," it is stated, "produce a grade of work which is entirely acceptable for a great many printing needs and produce it at sometimes half the cost in private plants. This inescapable truth has been demonstrated to us time after time in studying the operations of commercial as well as private plants."

In the report it is stated that in most instances the printer is not warranted in combatting the encroachment of justifying typewriters and duplicating machines in his own plant.

In concluding the report, J. W. Rockefeller, jr., and Associates state: "While the returns to our questionnaire indicate that most commercial printers believe that stepup production of at least 50% is necessary in newly designed equipment to enable the commercial printer to stand off the present threat of the private plant, it is our own conviction based upon careful cost analysis in many plants, both private and commercial, that if the wages now being paid in commercial plants are to continue at their present high level, the improvements required in production will be not 50% but in excess of 100%. In such operations as hand bindery work where the most primitive manual methods are still in use, moderately priced machines which will increase the operators' production at least 200% will be required."

Chargeable Hours

From the replies received, the following departments account for the total chargeable hours in percentages as follows: Composing, 36½%; press, 46%; bindery, 17½%.

In hand bindery operations, the following percentages of the total chargeable hours are reported: Flat sheet gathering (interleaving), 49%; padding, 19%; tipping, 2½%; hand numbering, 1½%; stringing, 1%; other operations, 27%.

BOOKS

Books and Printing: (A Treasury for Typophiles)

THE lover of typography, particularly books, should be eager to possess a copy of *Books and Printing: A Treasury for Typophiles*, edited by Paul A. Bennett who, as so many in the Graphic Arts industry already know, is associated with Mergenthaler Linotype Co.

The book is a collection of articles and essays by a considerable number of famous typographers and book designers, past and present, in the Graphic Arts. The articles, all of them, are informative and appreciative. The book is inspirational as well as practical. Perhaps the intent and purpose of the book can be explained best by quoting from the material appearing on the jacket: "An entertaining and enlightening work for everyone interested in the fun and enjoyment to be derived from the practice of modern creative art of book designing, it is one of the most beautiful books produced in our time. Everyone who has studied or is studying bookmaking and typography, every bookman who has a love of the craft, everyone who has admired a title page of fondled a binding will treasure this book for its unique combination of information and beauty."

In a review of this book it is difficult to avoid the use of superlative expressions. To one who is not deeply dyed in a knowledge of typography, a strong impression is obtained that machine composition is bent to an artful purpose.

In his *Introduction*, Mr. Bennett in expressing his appreciation to William Targ for inviting him to put this miscellany together and his patience in watching the book develop, states: "That hasn't proved anything like the challenging experience I envisioned, but instead became a spare-time, weekend pleasure I've enjoyed for months."

One of the outstanding features of the book is that the text pages were composed in 20 different type faces. Bennett explains that this was done "to demonstrate on a uniform paper surface and

PAUL A. BENNETT

under identical printing conditions the behavior of 20 of the finest types of our time."

Editor Bennett also comments: "Much of the detail and burden (in preparing the book) has fallen to the willing hands of Joseph Trautwein, the able designer responsible for this format, and the continuing interest of Joseph and Miriam Schwartz of Westcott & Thomson, Inc., the superior Philadelphia typesetters, whose wealth of typographic resources is evidenced in these pages."

The book was composed by Westcott & Thomson, Inc., Philadelphia; printed on Curtis Colophon special paper stock by George Grady Press, New York, and bound in Bancroft Buckram by Russell Rutter Co., Inc., New York. Design and Typography by Jos. Trautwein.

Among the "chapters" which seem to have a special appeal are: The Story of the Alphabet, by Otto F. Ege; Printing, Paper and Playing Cards by Lancelot Hogben; Title Pages: Their Forms and Development by A. F. Johnson; Metal-Flowers by Edward Rowe Mores; Printing Should Be Invisible by Beatrice Warde; Extracts from an Investigation into the Physical Properties of Books by W. A. Dwiggins; What Is a Private Press? by Will Ransom; The Anatomy of the Book, by William Dana Orcutt, followed by A Symposium in which is included material from a number of authors; Typography by Eric Gill; Types and Type Design by Frederic W. Goudy; The Amateur Printer: His Pleasures and His Duties by Peter Beilenson; Notes on Modern Printing, Merle Armitage; Benjamin Franklin: Printer and Publishers by John T. Winterich; The Book & Job Print by Earnest Elmo Calkins, and On Type Faces for Books by Paul A. Bennett.

In addition to the personal contributions of Paul A. Bennett, there are a number of distinguished authors. As listed in the *Contents* pages these are: Otto F. Ege, Lancelot Hogben, Ruth S. Granniss, Edwin Eliott Willoughby, A. F. Johnson, Lawrence C. Wroth, Ronald B. McKerrow, Edward Rowe Mores, James Watson, Evelyn Harter, Anne Lyon Haight, Beatrice Warde, Porter Garnett, W. A. Dwiggins, Desmond Flower, Bruce Rogers with a symposium by Carl Purington Rollins, Joseph Blumenthal, P. J. Conkwright, Arthur W. Rushmore, Milton Glick, Morris Colman, Evelyn Harter, Peter Beilenson, and Ernst Reichl; Robert Josephy, Will Ransom, Alfred W. Pollard, Sir Francis Maynell, Christopher Sanford, Arthur W. Rushmore, Edwin Grabhorn, Holbrook Jackson, Stanley Morison, Carl Purington Rollins, Eric Gill, Frederic W. Goudy, Theodore Low DeVinne, Bruce Rogers, Daniel Berkeley Updike, Peter Beilenson, T. M. Cleland, Oscar Ogg, Aldous Huxley, Merle Armitage, John T. Winterich, Earnest Elmo Calkins, James Shand.

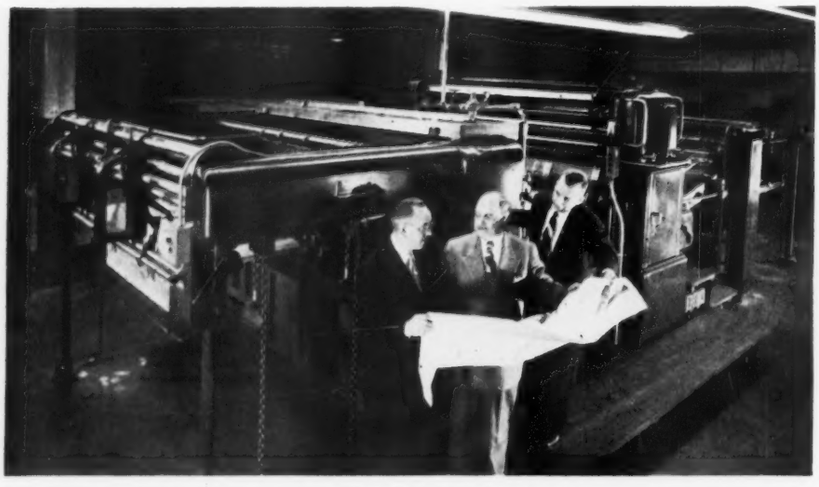
Books and Printing: A Treasury for Typophiles—Edited by Paul A. Bennett. Size 6¼ in. by 9⅜ in., 432 pages. Many illustrations including decorations. Beautifully bound in gray buckram, black and gold stamped. Front cover carries design of a punch cutting machine for matrix masters. Special edition limited to 1000 numbered copies. Published by The World Pub. Co., 2231 W. 110th St., Cleveland 2, O. from whom all copies should be ordered direct at $7.50 each.

ANPA Mechanical Conference Booths Over Half Engaged

Over half of the manufacturers' and suppliers' display booths for the June ANPA Mechanical Conference have been engaged.

The ANPA Mechanical Conference will be held at Fairmont Hotel, San Francisco, Monday, Tuesday and Wednesday, June 9, 10 and 11.

If you have not engaged space, write, wire or phone *Printing Equipment Engineer*, 1276 West Third St., Cleveland 13, O. Phone: CHerry 1-6645.



Executives of the Recorder Printing and Publishing Co., San Francisco, examine a press sheet from the company's new Miehle 76 Sheet-fed Rotary press. Shown from left to right are: Ben Hansen, General Supt.; Frank F. Kilsby, Vice Pres. and General Mgr.; and Harold Inverson, Miehle Printing Press and Mfg. Co.

Expansion Program in San Francisco Plant

The Recorder Printing and Publishing Co. of San Francisco recently installed a Miehle 76 Sheet-Fed Rotary Press as part of its five year $350 thousand modernization and plant expansion program. The new press, which makes a total of 26 presses operated by the company, will be used on long run jobs previously handled on flat bed presses.

In 1946, when the Recorder began its modernization program, the firm replaced eight of the 12 Linotype machines in its plant. Later, a Vandercook Safe Electric proof press and a Vandercook Reproduction proof press were added to the composing room. A Craftsman 51 in. by 76 in. Lineup and Register table, a Hammond saw and new type faces for both hand and machine composition followed.

The bindery acquired a 64 in. Seybold cutter, Cleveland KK and WWJ folders, and a Bracket safety trimmer. In the offset department, a 31 in. ATF Color Precision camera and a 134 Harris Offset press were installed. The letterpress pressroom is now equipped with Ortman spray guns operated from a central compressor.

In addition to printing periodicals for outside firms, the Recorder publishes its own daily newspapers and other publications in pamphlet and case-bound format. The company's offset department specializes in full-color reproductions for point-of-sale display and direct mail advertising.

Executives of Recorder are Frank F. Kilsby, Vice Pres. and General Mgr.; Joseph A. Marengo, Secretary-Treasurer; and Ben A. Hansen, General Supt.

Offset Duplicator Techniques

As explained in the introduction to the revised edition of *Offset Duplicator Techniques*, the operation of an offset lithographic duplicator is considered a fringe industry adjacent to the Graphic Arts industry which uses the same basic chemical and mechanical principles of production as the offset process. The most common use of the offset duplicator is in producing both line work and halftones on the 8½ in. by 11in. sheet size.

The 96 pages of the book contain 539 items of index information. This revised edition has been edited and brought up to date by Fred W. Hoch and Carl B. Harris. Author of the original book is Richard Caruzzi. Of the 17 chapters,

special attention has been given to the revision of those pertaining to photography, chemistry, plates and platemaking, type and typesetting, and preparation of copy.

Many of the original features contained in the first edition have been continued in this revised edition. Art work and Caruzzi's graphic method of explaining an operation or technique has been retained wherever possible. New methods, materials and machines now used have been added to bring the book up to date. Among the additions is an explanation of phototypesetting which includes brief descriptions of the various machines available for preparing this type of copy.

More than 100 illustrations accompany the text in explaining the different procedures applicable to offset duplicators. Some of the chapter headings are combination line and halftone work, color in offset, paper and binding, operating the duplicator, small shop layout and equipment, and press troubles. Twelve pages are devoted to a glossary of offset duplicator terms.

Offset Duplicator Techniques—Edited and revised by Fred W. Hoch and Carl B. Harris. Original edition by Richard Caruzzi. Book consists of 96 pages; size, 8½ in. by 11 in.; over 100 illustrations; case-bound in orange cloth cover with black stamping. May be ordered from Fred W. Hoch Associates, Inc., 461 Eighth Ave., New York 1, N. Y. Price, $5.00 per copy.

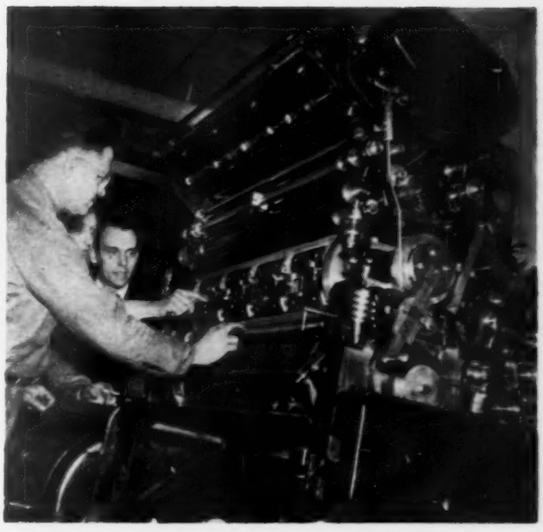
Preserves Documents and Manuscripts

By M. S. Kantrowitz, Chairman, Research Committee, Washington (D.C.) Club of Printing House Craftsmen.

THE method in long standing used for the preservation of rare documents has been to cover them with a thin, milk fabric known as Crepeline or Mousseline, applied by means of a starch paste. The technique of applying the silk properly without causing written or printed matter to bleed or blur, because of the solvent action of the paste and water employed, has required considerable skill resulting from practice. It is not, therefore, a process which the amateur can readily utilize. This traditional method of preservation does not offer complete protection from atmospheric conditions or from the attacks of insects and vegetable molds, although it does reinforce the paper to which it is applied by greatly strengthening its resistance to handling.

A relatively recent method of preservation which offers greater protection to the document consists in laminating it between two thin sheets of transparent cellulose acetate by means of the application of heat and pressure. The heat and pressure causes the plastic cellulose film to flow sufficiently at a temperature of 150 deg. F. to 200 deg. F., so that it becomes an incorporate part of the paper itself. Thus it is hermetically sealed against attacks of moisture or acid in the atmosphere, against handling, and against the attacks of insects or other vermin and the formation of bacterial growths.

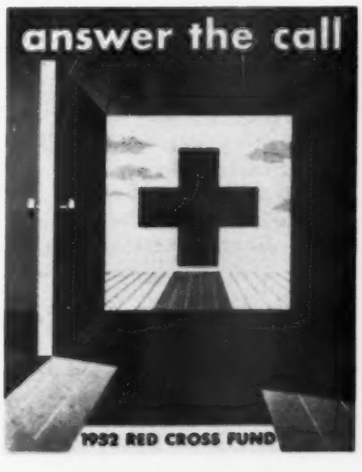
This cellulose film has been manufactured with a synthetic resin adhesive applied to one side which causes it to adhere to paper when applied by pressure alone without the use of heat. This is more convenient for use by inexperienced operators in preservation of documents, although it does not have the merits of the product applied by heat and pressure without the use of an adhesive.



Final Check on Harris Press—Elmer Schmalholz (left), Plant Supt. at the American Yearbook Co., Owatonna, Minn., makes final adjustments on a new 22 in. by 34 in. single-color Harris offset press recently installed by the firm. With him are Harris Press Erector Ralph Pufahl (center) and Carl Struck (right), sales representative for the Harris-Seybold Company in the Twin Cities area.

MLCo Directors Elect

Immediately following the Annual Meeting of Shareholders of Mergenthaler Linotype Co., on January 9, the Board of Directors met and re-elected the following officers: Martin M. Reed, President; George W. Allison, Vice President and Gen. Works Mgr.; Harry W. Porte, Vice President in Charge of Sales; Gordon B. Welch, Vice President; Eugene B. Mirovitch, Vice President for Latin America; John W. Reid, Treasurer; John E. Walsh, Jr., Secretary; C. F. Lucek, Controller; Carl A. Hergrueter, Assistant-Secretary and Treasurer; William H. Moore, Asst. Secy. and Treasurer, and John S. Conger, Asst. Secy. and Treasurer.



Dutro Opens Offices

Orville Dutro & Son, Inc., recently established offices in Chicago and New York. The Chicago office, located at 110 S. Dearborn St., will be managed by

FRED ALBUS N. X. GUTTMAN

Fred Albus. The New York branch is located at 1133 Broadway and is under the management of Norman X. Guttman. Albus has been associated with the Dutro organization since 1948. He has served the company as both salesman and demonstrator, and now will have charge of sales in the central area of the United States. Guttman, whose territory will consist of the eastern seaboard, is a graduate engineer of the University of Minnesota.

Equipment Replacement

(Abstract from address delivered by H. A. Porter, Vice President, Harris-Seybold Co., before convention of National Association of Photo-Lithographers, Buffalo, N. Y., September 1951.)

Executives of the majority of U. S. printing concerns realize that they are facing an equipment replacement program because it costs just as much for a press crew to operate a slow or undependable press as it does a press that will produce 25 to 30% more in a given day, week, or month.

NPA

Printing and Publishing Division

Nickel Conservation Recommendations

The critical shortage of nickel is of such concern to users and manufacturers of electrotype and stereotype printing plates that special conservation measures for this essential metal have been recommended for use within the industry. This action was agreed upon at a recent meeting in Washington attended by manufacturing and industry representatives.

There is no satisfactory substitute for nickel in certain stereotyping and electrotyping plate manufacturing operations. The total yearly requirement for normal use in 1950, including salts and anodes, was approx. 100 T. or 14/100% of national consumption. Ninety per cent is reclaimed and goes back into the national supply. Despite the limited usage, the industry is not able to obtain its normal needs at this time. This has resulted in numerous hardship cases.

So as to stretch the amount that is available to the utmost, the committee recommended the following advisory conservation steps:

(1.) That the thickness of the nickel deposit be held to the lowest minimum consistent with good plate manufacture on both electrotypes and stereotypes, 0.001 in. on electrotypes and not more than 0.005 in. on stereotypes.

(2.) That every effort be made to cut down on the excess area where extra nickel deposit acts as a bearing surface for further operations such as plate shaving, beveling, curving and other finishing operations.

(3.) That anode butts be used in an anode saver basket, or that anode butts be sent to your regular supplier of nickel for reclamation into the national supply.

(4.) That closer control be maintained over depositing solutions with emphasis on keeping all electrical contacts thoroughly clean.

(5.) That the loss of excessive drag out (solution) be reduced by removal of cases from the tank over a returnable drain.

(6.) That anodes be rotated at definite periods from front of tank to rear and also from center of rod to ends thereby keeping all anodes equal thickness.

(7.) That extreme care be exercised to prevent nickel deposits on the back of stereotype plates.

(8.) That all personnel concerned be briefed on the seriousness of the nickel shortage and to exercise special care in order to hold remakes to a minimum.

(9.) That the industry redouble its efforts in developing substitutes for the use of nickel.

Present at the meeting were: Donald G. Shook and Lee C. Penry, Printing and Publishing Div., NPA; H. J. Kent, R. R. Donnelley and Sons Co., Chicago; W. K. Ballantyne, Time Inc., Washington D. C.; Arthur N. Knol, W. F. Hall, Central Typesetting and Electrotype Co., Chicago; Walter C. Dohm, Norman-Dohm-O'Flaherty Co., New York; H. W. Haydock, Royal Electrotype Co., Philadelphia; John W. Iliff, Harshaw Chemical Co., Cleveland; John A. McLean, Printing Industry of America, Washington, D. C.; Edwin C. Maginnis and Frank C. Hamilton, Curtis Publishing Co., Philadelphia; Vernon R. Spitaleri, American Newspaper Publishers Assoc., New York; and A. J. Schloegel, Intl. Assoc. of Electrotypers and Stereotypers, Inc., Cleveland.

Poster Available

A POSTER enumerating the nine advisory nickel conservation steps, as outlined in the above article, has been prepared by the Intl. Assoc. of Electrotypers and Stereotypers, Inc., for display in electrotype and stereotype plants and departments. It is suggested that the poster be placed in a prominent place in the plant where it will serve as a daily reminder to the shop workers. The association also suggests that it might be well to get together all personnel directly interested, calling their attention to the poster and the present extreme need for nickel conservation. Printed on white stock in the patriotic red and blue colors, it measures 11¾ in. by 17¾ in. Copies may be obtained by writing: A. P. Schloegel, Exec. Secy., Intl. Assoc. of Electrotypers and Stereotypers, Inc., 701 Leader Bldg., Cleveland 14, O.

Amended CMP Reg. 5

The National Production Authority recently amended CMP Reg. 5 to permit the use of priority ratings for obtaining materials for installation of industrial equipment and to bring other provisions of the regulation up to date. A limit of 2 T. of carbon steel, 200 lbs. of copper products, and no aluminum, stainless steel or alloy steel is established for each installation. Steel nails, wire and strapping used for packaging have been removed from the prohibited list.

The amended regulation establishes separate minimum quarterly quotas of $1 thousand each for maintenance, repair and operating (MRO) supplies, minor capital additions and installations. Previously, the minimum for combined MRO and minor capital additions was $1 thousand a quarter.

It raises the limit from $750 to $1 thousand which a manufacturer may spend for each minor capital addition when he uses the MRO symbol to obtain materials. The limit is now 10 per cent of the quarterly quota or $1 thousand, whichever is greater.

Amended CMP Reg. 5 also expands the definition of operating supplies of a business enterprise to include expendable tools, jigs, dies, and fixtures used on production equipment, regardless of the accounting practice of the business.

Under the amended regulation, installation is defined as setting up or re-

Printing Plate Suppliers No Longer Require DO-MRO Rating

ARRANGEMENTS have been completed by the Printing and Publishing Div., National Production Authority, which makes it unnecessary any longer for suppliers of printing plate materials to demand DO-MRO ratings from their customers before supplying them with copper, zinc, aluminum, magnesium and other materials. Allotments of controlled materials and allocations of uncontrolled materials will continue to be made to these suppliers in the same volume as if their allocations were fully supported by DO-MRO ratings, but the actual ratings will not be necessary. It is understood that CMP Reg. 5 will be amended in the near future with provisions prohibiting the use of DO-MRO ratings on orders for printing plates.

Notwithstanding these new arrangements, rolled, forged and cast anodes will continue to be considered an operating supply to printing platemakers, who will continue to acquire them by applying the MRO allotment symbol and charging such purchases against their MRO quotas.

It is still necessary that orders for printing plates or for restricted metals, as defined in NPA Order M-65, carry the certification required by that order, either individually or on a blanket quarterly basis as follows: "The undersigned certifies, subject to statutory penalties, that the acquisition by the undersigned of the plates or restricted metal herein ordered will not be in violation of NPA Order M-65."

location of equipment in an existing building where the total cost of materials for such relocation or setting up does not exceed $1 thousand for one installation.

Recent Equipment Reports

To Install Hoe Press

The 80 year old Wichita (Kan.) *Eagle* has ordered from R. Hoe & Co., Inc., a new Hoe four unit, color-convertible press. The press is equipped with a double former, double delivery folder. The new press augments the *Eagle's* Hoe pressroom equipment to take care of an increased circulation and expanding advertising.

Miehle Installations

The Miehle Printing Press & Mfg. Co. has announced the following recent installations of Miehle presses and press equipment: No. 70 Cutter and Creaser, Associated Folding Box Co., Boston; Cromwell Carton Co., Marshall, Mich.; and Container Corp. of America, Chicago; No. 29 Offset Press, Acme Printing Co., Inc., Boston; Eldredge Company, Brooklyn, N. Y.; Wainscott Printing Co., Detroit; Esterling Printing Co., Detroit; Lakeland Color Press, Brainerd, Minn.; Haro Printing & Lithographing Corp., Chicago; Simmons-Sisler Co., Inc., St. Louis; and Tivoli Printing Co., Los Angeles; No. 29 Letterpress, Rodgers Printing Co., Irwin, Pa.; Grand Rapids Label Co., Grand Rapids, Mich.; Wheeler Van Label Co., Grand Rapids, Mich.; Target Printing & Lithographing Co., Chattanooga, Tenn.; Tivoli Printing Co., Los Angeles; and California Institute of Technology, Pasadena, Calif.; No. 44 Gravure 2-Color, Gair Cartons Div., Piermont, N. Y.; No. 41 SC Letterpress, A. Colish, Inc., New York; U. S. Government Printing Office, Chicago; and Christian Printing Co., Inc., Durham, N. C.; No. 56 TC Letterpress, Chilton Company, Philadelphia; W. B. Saunders Co., Philadelphia; and Herald Publishing House, Independence, Mo.; No. 5/0 Perfecting Press, Mac : Printing Co., Easton, Pa.; No. 61 SC Offset Press, U. S. Government Printing Office, Washington, D. C.; Stripping Device, Ohio Boxboard Co., Rittman, O.; Morris Paper Mills, Morris, Ill.; and American Coating Mills, Chicago; No. 76 TC Offset Press, Container Corp. of America, Chicago; No. 76 SC Rotary Letterpress, The Recorder Printing and Publishing Co., San Francisco; and State Printing Co., Sacramento, Calif.

Texas Paper Modernization

The Temple (Tex.) *Telegram* recently completed a modernization program, undertaken immediately after World War II by Publisher-Editor Frank W. Mayborn, with the installation of a new Goss 40 page Universal press. New composing machines, new equipment throughout the composing room, redesigning and decorating of the three story brick buiding and installation of a complete engraving department, were among the improvements incorporated by Mayborn and General Mgr. C. A. Schulz. The Goss press provides four colors and is equipped with General Electric controls.

E.B.Co. Presses Installed

Four recent installations of E.B.Co. 22 in. by 34 in. Single Color Offset Presses have been announced by the Printing Machinery Div., Electric Boat Co., as follows: Quality Press, Patterson, N. J.; Bible Press, Inc., Detroit, Mich.; Byrum Lithographing Co., Columbus, O.; and Ivy Hill Lithograph Co., New York, N. Y.

Hoe Color Press

The Oakland (Calif.) *Tribune* has ordered a new Hoe 8 unit color-convertible from R. Hoe & Co., Inc. The press will be equipped with two double former, double delivery folders, and also with facilities for printing additional color. Hoe reels, tensions and full-speed pasters will also be included. The Oakland *Tribune*, it is stated, now averages more than 191,000 copies daily, while its Sunday circulation has increased to more than 199,000. The *Tribune* also ranked seventh in the country, according to *Media Records*, in the total linage of r. o. p. color advertising carried in its daily and Sunday editions during 1950.

Lawson Installations

Installations of Lawson equipment recently reported by the E. P. Lawson Co., according to an announcement by David W. Schulkind, President, are as follows: 39 in. Automatic Clamp Cutters, The Beistle Co., Shippenburg, Pa.; Challenge Printing Co., New York; American Fiber Envelope Co., Philadelphia; Deluxe Check Printers, Inc., Chicago; Crown Sample Card Co., New York; Alexander Smith & Sons, Yonkers, N. Y.; The Printers Wick, Scarsdale, N. Y.; and Poggi Press, Hoboken, N. J.; 46 in. Hydraulic Clamp Cutters, Sample Card Co., New York; Spielman & Co., Philadelphia; and Sterling Paper Co., Columbus, O.; 52 in. Hydraulic Clamp Cutters, Pittsburgh Plate Glass Co., Creighton, Pa.; Penn Paper & Card Co., Inc., Philadelphia; The Todd Co., Rochester, N. Y.; Edw. Stern & Co., Philadelphia; Filmwood Corp., Camden, N. J.; Gibson Art Co., Cincinnati, O.; Kurtz Bros., Clearfield, Pa.; Ansco, Binghamton, N. Y.; and Herst Lithographing Co., Inc., New York; Drill Slotting Machines, Arthur J. Gavrin, New Rochelle, N. Y.; Boorum and Pease, Brooklyn, N. Y.; U. S. Army, Ft. Lee, Va.; and Medow Printing, New York.

Stanton C. Saunders has been appointed Asst. to the President of C. B. Cottrell & Sons Co. Saunders has been with the Cottrell firm for more than 16 years and has served in several capacities. His new position will include new product developments, sales, advertising and general executive duties. He will make his headquarters at the home office in Westerly, R. I.

Becomes Magazine

Effective with the January 1952 issue, the Intl. Asso. of Electrotypers & Stereotypers, Inc., announces a change in the name of its monthly publication, the *Electrotypers & Stereotypers Bulletin* to *Electrotypers & Stereotypers Magazine*. In its 38th year, this publication contains topics of interest to plant executives and shop personnel. New processes in electrotyping, stereotyping and allied fields are included, together with material of general Graphic Arts interest. Alterations in typographic format have been made. The Garamond series is employed together with Spartan for display. A specimen copy may be secured from The Electrotypers & Stereotypers Magazine, A. P. Schloegel, Editor, 701 Leader Bldg., Cleveland 14, O.

CRAFTSMEN SUPERVISORY TRAINING PROGRAM

AN aggressive Supervisory Training Program with a whole new approach to the dissemination of ideas and instruction in the field for the benefit of the International Association of Printing House Craftsmen's 12,000 plus membership will soon be under way. This Special Committee is headed by William Gutwein who is well fortified for his position of leadership by his broad experience in this field.

The Committee is formulating a plan which will embody several ways in which a Craftsman, anywhere, can avail himself of the kind of program which will fit his particular circumstances and resources.

The program tentatively referred to as the Supervisory Training Committee's Five Point Program for Craftsmen will include: (1) Foreman's Management Program; (2) College Education Program; (3) Recorded Case Problems; (4) Movies Devoted to Supervisory Problems; (5) Bibliography of Selected Reading Material.

Cooperate with TV—Don't Fight It

(Abstract from address delivered by H. A. Porter, Vice President, Harris-Seybold Co., before convention of National Association of Photo-Lithographers, Buffalo, N. Y., September 1951.)

If you are one of the many in the Graphic Arts industry who are singing the blues because they feel the impact of the new advertising medium television, my advice is: Don't try to buck it. It certainly is an unstoppable force. Why not play it smart by going partners with television? There is a great need for something to supplement television's instantaneous sight and sound. Something is needed to reinforce the advertising dollars that are being diverted to TV. Color television will open even more profitable opportunities. But don't wait for its business. Go out and build your own opportunities. Create business to tie in with TV promotion. You'll receive thanks from the advertiser because of his increased effectiveness.

Fairchild Service Center

A Scan-a-graver Service Center has been established in the Chicago area, according to a year-end announcement by C. A. Harrison, Vice President of Fairchild Camera and Instrument Corp. The new center will service an area with a 50 mile radius around the tip of Lake Michigan, which includes 19 machines presently installed in Michigan, Indiana, Illinois and Wisconsin. These Scan-a-gravers were previously maintained from centers located in Mount Clemens, Mich.; Dayton, O.; Moline, Ill.; and Oshkosh, Wis. Howard H. Carstensen of Libertyville, Ill., is Customer Engineer at the Chicago center.

Graphic No. 1

The first issue of *Graphic*, a quarterly publication for the Graphic Arts industry has been issued by Harris-Seybold Co. The first issue consisting of eight pages was printed entirely by offset with four pages in four color process. The lead article, *The Old Leather Chair*, is a sentimental but practical discussion in which the chair "represents a concept—a method of approaching problems in the Graphic Arts—that will guide the editing of *Graphic*." The writer of the article points out that Alfred Harris while sitting in the old leather chair under discussion created many ideas which have been incorporated in the design of present-day Harris presses.

The cover (done entirely in four color process offset) is a study in itself. It consists of three photomicrographs, enlarged 100 diameters, each in a 3⅝ in. circle. Each circle represents a reproduction taken from a comparable color area. The original specimen areas were selected from actual printed jobs produced by letterpress, offset and gravure in three different plants. The original letterpress sample was 120 line screen; the original offset sample was 133 line screen, and the original gravure specimen was 150 line conventional screen. Even though printing plant executives may not agree as to the effectiveness of the microscopic demonstration, yet the reproductions present solid food for thought.

In any event, the first number of *Graphic* is beautifully done.

Opens Atlanta Office

An Atlanta (Ga.) sales office was recently opened by the Ideal Roller & Mfg. Co. at 603 Parkway Dr., N.E. The new branch office is to be managed by John R. McStatts who will be assisted by Robert C. Fuller, jr. The office is the eighth of its kind to be established by Ideal. According to E. B. Davis, Vice Pres. of the company, Ideal is now represented in every state with the exception of Idaho and Wyoming. The firm also has representation in South America, Asia and Europe.

John R. McStatts who will manage the new Ideal Roller & Mfg. Co. branch in Atlanta, Ga.

RIT Catalog Available

General information concerning courses of instruction, entrance requirements, entrance examinations, occupational counseling, and descriptions of the various departments' courses at Rochester Institute of Technology is included in the 100 page 1952-53 catalog now available. Among its contents are full particulars on the Publishing and Printing Dept. for students who wish to undertake such courses of study. Those desiring copies should write to the college at 65 Plymouth Ave., So., Rochester 8, N. Y.

Paisley Purchases Plant

Murray Stempel, Exec. Vice Pres., Paisley Products, Inc., has announced that his firm has purchased the plant, equipment, formulas and manufacturing processes of the Layton Elastic Glue Co., Chicago. It will be operated as a subsidiary of the Paisley company. Arthur Fischer, former head of the Layton company, will join Paisley in a consulting and advisory capacity. Layton sales and service will be under the direction of Earl C. Lenz, Paisley's Vice Pres. and General Sales Mgr., with plant and laboratory under Sam Schuller, Vice Pres. and Technical Dir.

St. Louis Elections

Recent elections held by the Associated Printers and Lithographers of St. Louis, Inc., resulted in the following being elected to a directorship for a three year term beginning with January, 1952: Ci Bruce, Bruce Burgess Printing Co.; L. B. Brown, A. R. Fleming Printing Co.; Geo. Gannett, The Geo. D. Barnard Co.; Clyde Hilton, Hilton Printing Co.; Ray Kutterer, Kutterer-Jansen Printing Co.; and Clarence Spaethe, Compton & Sons. At a special meeting of the directors, the following were elected to office; President, George Von Hoffmann; Vice President, H. J. Echele; Secretary, Leo W. Painter; and Treasurer, Geo. B. Gannett.

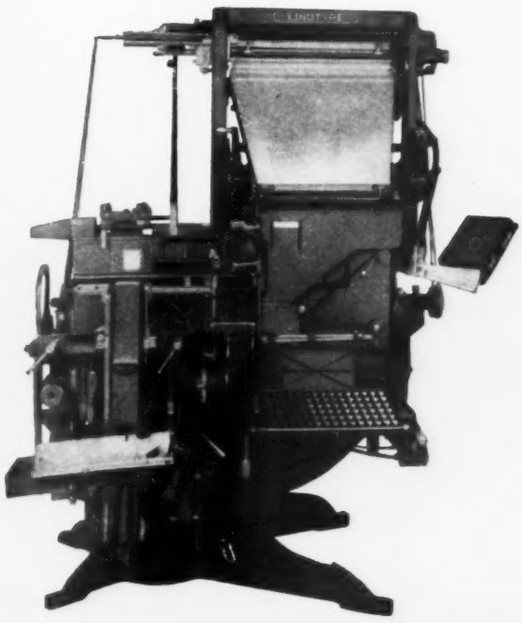
MMM Atlanta Office

Opening of a new regional sales office and warehouse building located at 732 Ashby St., N. W., Atlanta, Ga., was announced recently by officials of Minnesota Mining & Mfg. Co. George E. Steck has been Southeastern Cellophane Tape Sales Mgr. for the company since 1948 when MMM opened a sales office in Atlanta. Russell D. Baird, formerly office manager of the firm's branch at High Point, N. C., has been named to a similar post in Atlanta.

F. Jack Jeuck, Divisional Executive Vice Pres. and Central Dist. Mgr., Interchemical Corp., Printing Ink Div., has announced that W. Sherman Ruxton (left), who has served as IPI Chicago branch manager and Central Dis. Sales Mgr., will now devote his full time to the latter duties. Lambert H. Fish (right) succeeds Ruxton as IPI Chicago Branch Mgr. Ruxton's headquarters will continue to be in Chicago at 161 W. Harrison St. He has been with IPI for 45 years and served as manager of the Chicago branch for 17 years. Fish has been assistant manager of this branch since 1948. He is a graduate of Washington and Jefferson College and has been with the IPI organization since 1934. He is a member of the Chicago Club of Printing House Craftsmen.

Supplymen Elect

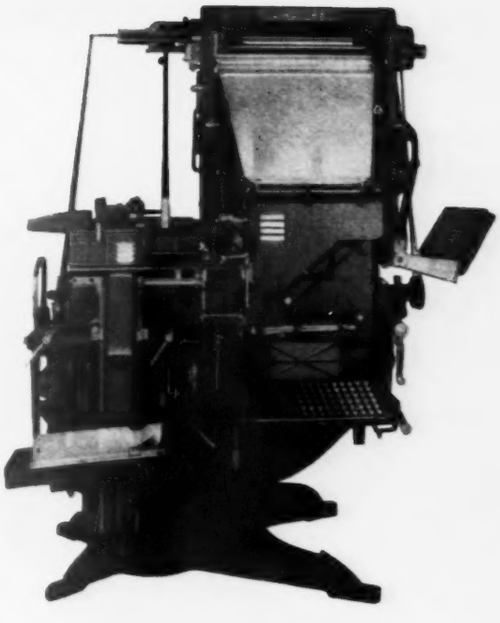
At a recent meeting of the Printers Supplymen's Guild of Cleveland, the following officers were elected: President, John M. Morehouse, Harris-Seybold Co.; Vice President, Jo M. Shaub, Ohio Knife Co.; Secretary, Sidney Langford, Sigmund Ullman Co.; and Treasurer, Lester C. Strom, Sam'l Bingham's Son Mfg. Co. Board members are C. C. Clippinger, Union Paper & Twine Co., and Frank Morrison, Morrison Printing Ink Co.



When your production is geared to a single-magazine machine, the Model 5 Linotype is the machine for you! This basic Linotype is a sound investment that really pays off in these days of skyrocketing costs. For in addition to its modest price, the Model 5 offers steady, trouble-free operation and easy maintenance that will give you a completely new concept of profitable straight text composition!

Your Partners for Profit!

If your present operations—or future plans—call for a machine that handles a greater variety of work, take a good look at the *new* Model 31 Linotype . . . the "workhorse of the composing room." The 31 has been newly-engineered—incorporating all the latest Linotype developments that deliver more type at the lowest possible maintenance cost. And with up to four magazines at your disposal, the Model 31 provides you with ample capacity to handle any future expansion. Talk over your needs with your Linotype Production Engineer . . . he can tell you which Linotype is best suited to your own requirements.



• LINOTYPE •

Set in Linotype Times Roman and Spartan Families

MERGENTHALER LINOTYPE COMPANY
29 Ryerson Street, Brooklyn 5, N. Y.

Patents

For The GRAPHIC ARTS

Covering patents issued Dec. 4, Dec. 11, Dec. 18, Dec. 25.

Binding, Cutting, Perforation

2,577,568. PLASTIC BINDING OF HARD CASED BOOKS comprises the steps of establishing a book block consisting of a multiplicity of separate leaves and having a smooth back edge surface wherein the edge of each leaf is squarely exposed at the level of the surface, applying to the back edge surface and in edgewise adhesive engagement with each leaf a water-insoluble adhesive in flowable form to constitute a layer, rounding and backing the book block by mechanical deformation of its back edge surface to provide the block with a rounded, hinge-defining configuration which is adapted for application of a hard casing to the block. Invented by Louis and Peter de Florez, Pomfret, Conn., and Owen L. Gore, Great Neck, N. Y. Assigned, by mesne assignments, to The de Florez Co., Inc., a corporation of Delaware. Application May 1, 1948. 9 Claims.

2,578,176. SHEET COLLATOR, for bookbinding operations, includes bins arranged one above the other in spaced relation, adapted to hold paper, suction fed for separating and raising the uppermost sheet from each bin, and sub-atmospheric means leading to the suction feet. A vacuum operated electric switch is carried by each foot and a feed conveyor receives sheets raised by the suction feet. There is an electric switch between the feed conveyor and the means for advancing the conveyor and electrical connections between vacuum operated electric switches on the suction feet and the switch on conveyor. Such electrical apparatus stops the feed conveyor movement toward bins if one foot fails to lift a paper from a bin. Invented by Albert Dager, Los Angeles, California. Unassigned. Application September 17, 1945. 6 Claims.

2,579,488. METHOD OF BOOKBINDING comprises providing a strip of thermoplastic material having two plies and two flanges, placing the edges of the book folios against the inner one of the plies and between a pair of the flanges and positioning an electrode between the plies. Another electrode is placed so as to provide with first electrode an electronic field containing the folio edges contacting the inner ply and force the softened ply between the folios. A casing is placed against the other pair of flanges and electrodes are used to provide an electronic field including the flanges and casing. This softens the flanges and cements them to the casing. Invented by Harry Freeman, Providence, R. I. Unassigned. Application October 23, 1946. 4 Claims.

Composing Room Equipment

2,577,672. MAKE-UP GALLEY includes a type receiving plate having raised side and end walls. An elongated block is mounted on the side edge of the plate opposite the side wall and a type positioning and locking arm is slidably mounted at one end. A guideway is formed on the inner side of the block. A plate is fixed on the arm and a guide pin is disposed through the plate. A first rotatable sleeve is concentrically disposed on the pin. Complementary means are formed on the fixed plate and sleeve for frictionally locking the pin. A second sleeve provides for selectively rotating the guide pin. Other means are operatively connected to the pin for reciprocating the same out of guideway when pin is rotated into a predetermined angular position. Invented by Frank Bernik, Mount Vernon, Washington. Unassigned. Application March 1, 1948. 19 Claims.

All new patents for the Graphic Arts are reported exclusively for Printing Equipment Engineer by Invention, Inc., an industrial patent research organization in Washington, D. C. Invention, Inc., presently has the only staff in the country that examines, in the U. S. Patent Office, the complete printed copy, drawing by drawing and page by page, every one of the several hundred new patents issued each week. Printing Equipment Engineer is the only trade publication in its field offering a report based on this complete coverage. For copies of the patents listed here specify the patent numbers and send 25c for each separate patent, or 10c for each trade mark or design patent (stamps not accepted) to the Commissioner of Patents, Washington, D. C.

Feeding, Folding, Delivery

2,576,956. FEEDING AND STACKING METHOD AND MACHINE handles stacks of paper, i.e., takes away a completed stack to make way for a new one without shutting down the machine. This is accomplished by feeding the sheets to a predetermined region and thereafter beyond the predetermined region along a direction at a predetermined speed. The speed of feed is then reduced prior to their reaching the above region and the speed of feed of numerous sheets is increased above the predetermined speed beyond the said region in order to clear the said region of sheets. The sheets are then fed along a different predetermined direction. Invented by Louis L. Matthews, Westerly, R. I. Assigned to Maxson Automatic Machinery Co., Westerly, R. I. Application January 14, 1949. 43 Claims.

2,577,261. MACHINE FOR INSERTING SUPPLEMENTS INTO SIGNATURES is of the type which uses a transporting table on which a conveyor travels, and an inserting device is positioned at the fore end of table. A signature feed is provided and a driver is arranged between conveyor and the feed. Suckers arranged along the table open the signatures. The arrangement and operation of the conveyor and feed are timed to deposit and convey the signatures over the table in overlapping relation along the suckers. Invented by Rudulf Moser, Lyss, Switzerland. Assigned to Beweg A.-G., Berne, Switzerland. Application March 19, 1947; in Switzerland March 1, 1946. 4 Claims.

2,577,424. A SHEET STRIPPER comprises upper and lower dies, means for moving one of the dies toward the other die to exert pressure on an interposed pile of cut and creased sheets to sever the connections between the useful and waste portions of the sheets to strip them. Dies have coacting cutting and stripping elements of the same contours as the useful portions. Means are provided for removing the lower die with its pile of stripped sheets from under the upper die. Invented by Hans J. Luehrs, Westerly, R. I. Assigned to C. B. Cottrell & Sons Company, Westerly, R. I. Application December 31, 1946. 24 Claims.

2,578,700. SHEET CONTROLLED INTERRUPTER FOR OFFSET PRINTING PRESSES is for use with a feed table for supporting sheets fed automatically in timed sequence, front registering means associated with the table, and a printing press having an impression cylinder with sheet grippers. An impression throw-off mechanism functions to turn first the inner and then the outer eccentrics mounted in the frame of the device for moving the blanket cylinder relative to the printing plate and the impression cylinder

A Better Furnace ... At a Better Price

The **NOLAN** METAL REMELTER

Saves Time
Saves Money
Saves Work

A compact, highly efficient metal remelting furnace. Priced surprisingly low and designed to make your remelting and repigging easier at money-saving speed. Available in models from 600-lb. capacity to 10-ton. Write for Bulletins.

NOLAN, CORP.
ROME, NEW YORK
Builders of Quality Printing Machinery

ELIMINATE HAND-PACKING!
IMPROVE PRINTING QUALITY

by means of the

STEREOTEX
HYDRAULIC MATRIX PRESS
and
AUTOMATIC BACKING PAPER

PAYS FOR ITSELF IN SHORT TIME

Our Automatic Space Backing Paper is also suitable for roller-molding. Write for full particulars.

STEREOTEX MACHINERY CO. Westport, Conn.

in sequence. Invented by Charles W. Harrold, University Heights, and Arthur B. Woodruff, Brecksville, Ohio. Assigned to Harris-Seybold Company, Cleveland, Ohio. Application July 12, 1946. 16 Claims.

2,578,779. FEEDING MECHANISM FOR PRINTING MACHINES is for use on machines of the silk screen stencil type in which pigments, etc., are forced through the screen for making posters, signs, decalcomanias, etc. It includes a work-supporting table having a flat upper surface with a work-processing position and a channel. A rail reciprocates in the channel and has a flat upper surface flush with that of the work table. The rail has a pair of work-engaging stations. Means associated with each station are adapted to engage a work unit whereby movement of the rail in one direction carries one station and the work unit away from processing position on the table and the other station and the work unit on same into processing position. Invented by James A. Black, Grand Rapids, Michigan. Unassigned. Application May 2, 1947. 10 Claims.

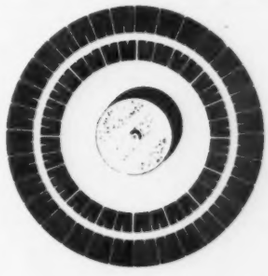
2,579,406. FRONT EDGE DETECTOR MECHANISM FOR USE IN SHEET FEEDING APPARATUS embodies a layboard and front lays up to which the front edge of each sheet in turn is moved for registration. The mechanism comprises a feeler in the form of a pivoted arm arranged to be partially rotated about its pivot by engagement with the front edge of each sheet. A sensing member provides a sensing abutment to be constantly oscillated and a stop member located between the feeler and the sensing abutment has a releasable latching engagement with the feeler. The latching engagement is releasable on movement of the feeler by a correctly timed sheet and means constantly urge the stop member against the latch control of the feeler, to position. A secondary means resets the stop member. Invented by George W. Tebbs, Woodford Green, England. Assigned to Headley T. Backhouse, Wentworth, Surrey, England. Application July 29, 1947; in Great Britain March 21, 1946. 8 Claims.

2,579,540 *and* 2,579,541. GRIPPER RELEASE MECHANISM FOR SHEET HANDLING MACHINES *and* CONTROL MECHANISM FOR THE DELIVERY STACK OF SHEET WORKING MACHINES may be used in conjunction with a printing machine. The gripper release mechanism is designed to insure the proper delivery and obviate accidents by stopping the machine in good time or before normal operation can involve an accident causing a stoppage likely to twist the bars. The control of patent No. 2,579,541 makes use of one feeler only. This acts on the mechanism for sinking the pile so that the last sheet delivered is always at the same level through the intermediary of elements which can perform three distinct functions. Such functions are the stopping of the sinking mechanism as long as the stack does not exceed a predetermined height, actuating the mechanism when at least this height is reached, and simultaneously stopping the machine when this height is exceeded by a given quantity. Invented by Henri Bobst, Lausanne, Switzerland. Unassigned. Applications April 11 and April 19, 1946, respectively; in Switzerland, April 12 and April 23, 1945. 9 and 5 Claims, respectively.

Miscellaneous

2,577,519. DRY POWDER SPRAYER is for spraying a dry powder material upon printed sheets as they are moved toward stacking to prevent offset of ink, colors, etc. It comprises a holder with a chamber for the powder, the body portion and cover portion having mutually engageable closing portions, connecting means for connecting the body and cover portions and having a passage therein and an opening at the upper portion, and a spray nozzle means connected to lower end portion. The cover portion has an air passage provided with an air discharge means located in the upper portion of chamber for producing a cloud of powdery material in the chamber portions. Invented by Eric Gustafsson, John W. Baur, and Theodore Kern, Chicago, Ill. Assigned to Binks Manufacturing Co., Chicago, Ill. Application May 14, 1947. 9 Claims.

2,578,633. DRIER FOR PRINTED WEBS. A device for drying the ink on printed webs of non-absorbent material includes a drum having a peripheral surface around which the web passes for drying. An arcuate casing extends around a portion of the periphery of the drum and has closed sides and ends forming with the drum an arcuate drying chamber. Sources of infrared radiation in the casing are disposed to radiate onto the web at least at the entrance end of the chamber. A suction duct communicates with the casing to remove vapors from the chamber. Means are provided mounting the casing to be elevated from the drum. Means actuated by elevation of the



UNBEATABLE COMBINATION!

. . . HIGHEST QUALITY!

. . . ECONOMY!

EASTERN Products give your plant the double barreled advantage of economy and efficiency . . . plus fast, reliable service!

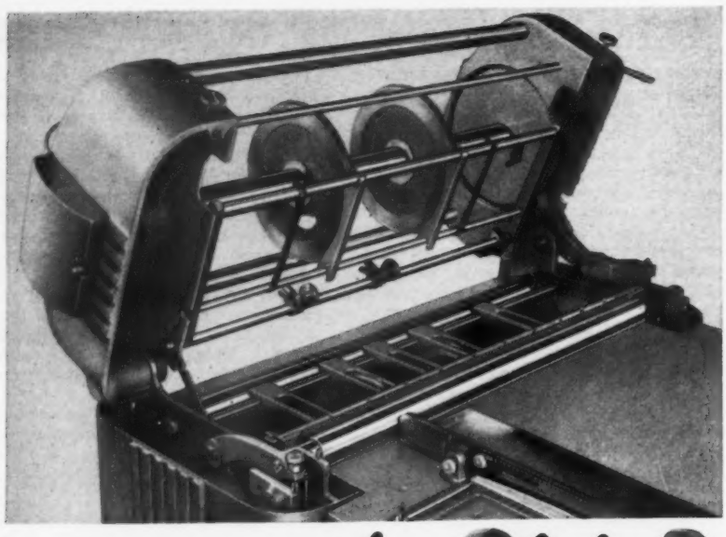
TRY THESE EASTERN PRODUCTS IN YOUR PLANT!

- FLECTO GUMMED BACKING FELT
  (Individually packed 5 sheets per bundle)
- PLASTIC MOLDING BLANKETS
- NEOPRENE BLANKETS: 1/8", 3/16", 1/4"
- DEEPMOLD BLANKETS
- TRU-MOLD CORK MOLDING BLANKETS
- BACK-UP BOARD .015 FOR 18 GAUGE ZINC
- DOUBLE COATED CUT MOUNTING TAPE: 1/4", 1/2", 1", 2"
- DIRECT PRESSURE MOLDING MATERIALS
- EASTERN CIRCULAR SAWS AND JIG SAW BLADES
- MATRIX DRYING MACHINES
- MATRIX SCORCHERS . . . MATRIX TRIMMING KNIVES
- ASBESTOS COVERS FOR ALL SCORCHERS
- CURVED AND FLAT CASTING BOARD
- COMPOSING ROOM AND STEREOTYPE EQUIPMENT
- STA-HI EQUIPMENT

EASTERN FOR ECONOMY

EASTERN NEWSPAPER SUPPLY, INC.

9603 Northern Boulevard Corona L. I. New York



THE *Rosback*

PONY *Vari-Speed* ROTARY

PERFORATOR

"Eats Up" Perforating Jobs

- **2-10 Sheets per lift**
- **Up to 30" x 30" Stock**
- **Continuous Perforating**
- **Strike (or Skip) Perforating**
- **Variable Speed Drive**

For little more than the price of a vertical power perforator of similar sheet-size capacity, you can put the Rosback Pony *Vari-Speed* Rotary Perforator to work in placing your perforating on a modern, fast, low-cost production basis.

The Rosback Pony Perforator does round hole perforating—the type of perforating most satisfactory to most customers, as proved over the years. You can perforate two to ten sheets at a time—cutting costs to half or less as compared with perforating on any vertical or slot rotary perforator.

Operation of the machine is quickly learned because of the *Variable-Speed Drive*. A convenient handle on the front readily selects the desired speed, from 24 to 48 r.p.m. Any operator can feed the Pony *Vari-Speed* Rotary—even on strike work—and increase her speed as she gains proficiency. Experienced operators can obtain full production right at the start.

The fundamental principle of all Rosback Round Hole Rotary Perforators—proved by more than 30 years' of continuous use—is incorporated in the Pony *Vari-Speed*. The refinements and conveniences in the operation of this machine make it the leader in modern perforating equipment. See your nearest Rosback dealer, or write us for complete descriptive folder.

F. P. ROSBACK COMPANY • *Benton Harbor, Mich.*

LARGEST PERFORATOR FACTORY IN THE WORLD

casing close the suction duct. Invented by Marcel Mauffre, Paris, France. Assigned to La Cellophane, Paris, France. Application April 29, 1949; in France April 29, 1949. 4 Claims.

2,579,044. METHODS OF EMBOSSING FILM AND COATINGS PRODUCED FROM HEAT CURABLE ELASTOMERS. Embossed forms are produced on paper by letterpress printing with an ink composed of two and one-half parts ammonium bicarbonate, two and one-half parts sodium bicarbonate, ten parts diethanolamine, three parts oil-modified phenolic varnish, eighteen parts dextrin, and six parts water and pigment. Inked parts are allowed to gather atmospheric moisture and a layer of vinyl chloride plastisol is applied and the printed and coated paper is subjected to 350° F. to cause transformation of accumulated atmospheric moisture upon the ink into gases for embossing the layer of plastisol while it is setting. The heat also releases additional gases from the bicarbonate. The combined gases are held under pressure until the chloride coating is soft and flexible and is embossed with a permanent and resilient facsimile in relief. Invented by Saul W. Kober, Flushing, N. Y. Unassigned. Application July 16, 1948. 1 Claim.

2,579,182. METHOD OF MAKING MECHANICAL OVERLAYS for use in printing apparatus comprises providing an impression member of a printing apparatus having positioned on the impression surface thereof an assembly. The assembly comprises a base sheet material with an adhesive surface on one side, a porous sheet material in contact with the adhesive surface and a sheet loosely coated on the side in contact with the porous sheet with finely divided particles. A type form with type of different heights is applied to the assembly causing some of the particles to pass through the porous sheet material and form adhered clusters with the adhesive opposite the type. The coated sheet is then removed. Invented by Alfred E. Farley, Chicago, Ill. Unassigned. Application December 6, 1948. 18 Claims.

Plate Making

2,577,984. METHOD OF MAKING COLOR PRINTING PLATES, which is practical for reproducing colored pictures in daily newspapers, involves making screened color-separation transparencies and preparing a color proof from them. Colored screened positive color-separation transparencies for making color proofs are made photographically. The color proof is made by photographing each one of a set of continuous-tone color separation negatives through a half-tone screen on a washoff relief film of such high contrast that it provides exposed dots, each dot extending throughout the thickness of the emulsion layer of the film and being of uniform opacity and of uniform cross-sectional area, developing, tanning, bleaching and washing off the films and coloring the gelatin dots remaining on each film the color of one of the process inks to be used, and superimposing the colored films in register on an opaque white background. Invented by Harry W. Warnecke, Putnam Valley Township, Put-

nam County, N. Y. Unassigned. Application November 8, 1945. 1 Claim.

2,578,209. METHOD OF MAKING MOLDS FOR ELECTROTYPES consists in heating to a molding temperature two sheets of thermoplastic material. The sheet which forms the electrotype mold is placed upon a molding pattern with a relief design and upon that is placed a thin sheet of tough, pliable grain free plastic resistant to a temperature higher than the molding temperature of the thermoplastic material. Upon that is placed the other sheet of thermoplastic material, and upon this sheet is a resilient blanket having grain. The blanket, sheets, and pattern are pressed together thus causing the first moldable sheet to conform to the contours of the molding pattern. The sheets, blanket and molding pattern are held under pressure until the first sheet has cooled and set. Invented by Howard G. Schwarz, Newbury, Ohio. Assigned to The Art Electrotype Co., Cleveland, Ohio. Application November 30, 1949. 6 Claims.

2,580,131. A LITHOGRAPHIC PLATE is treated to form a uniform coating by rapidly revolving it in a horizontal plane about an axis generally centrally thereof. A coating liquid is poured on the revolving plate whereby the liquid will be spread under the influence of centrifugal force. A current of air is caused to flow uniformly radially inwardly over the plate from about the entire periphery during application of the liquid. Air is removed from the center surface of the plate upwardly along the axis of rotation. Invented by George S. Rowell, Bedford, Ohio. Assigned to The Chandler & Price Co., Cleveland, Ohio. Application February 25, 1947. 10 Claims.

Printing Inks

2,579,836. THE INK consists of a solution of a resin in a petroleum hydrocarbon which is slow drying to non-drying at room temperature but which volatilizes rapidly at 150° C. The resin comprises a solvent extracted Utah coal resin modified by reaction with 5-15 parts of an alpha, beta-ethylenically unsaturated polycarboxylic acid and from 5-15 parts of a polyhydric alcohol per 100 parts of the coal resin. Invented by Ernest D. Lee, Teaneck, Rupert J. Schefbauer, Jr., Union City, and Otto P. Berberich, Jersey City, N. J. Assigned to Interchemical Corp., New York, N. Y. Application March 26, 1948. 4 Claims.

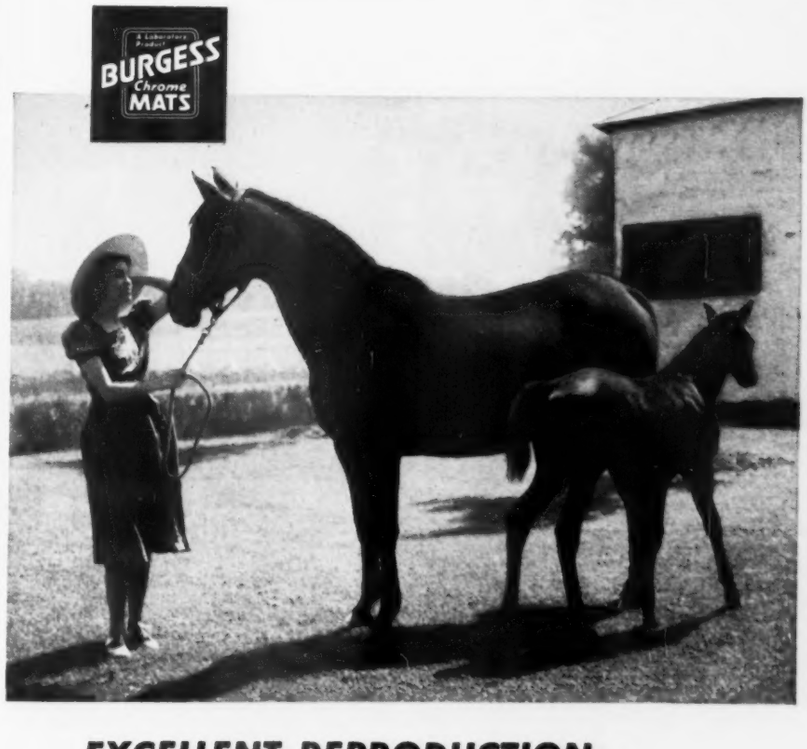
2,580,205. THE BLACK PRINTING INK is composed of carbon pigment dispersed in a vehicle together with a solution of a toning oil-soluble basic dye in oleic acid and 0.2 to 2 percent, based on ink weight, of zinc naphthenate. Invented by Andries Voet, New York, N. Y. Assigned, by mesne assignments, to J. M. Huber Corporation, New York, N. Y. Application October 2, 1946. 7 Claims.

Printing Presses and Equipment

2,577,073. PLATE CLAMP MEANS for clamping an edge of a lithographic plate to a plate carrier uses a clamp which is movable toward and away from the plate carrier to closed and open positions, a lock and a handle pivotally mounted on the plate carrier in position for engaging the lock to shift the latter rectilinearly in opposite directions. Means extending through plate carrier between clamp and lock is adapted upon rectilinear movement of the latter in opposite directions for opening or closing the clamp. In such positions of the clamp, the handle is juxtaposed with relation to opposite ends of lock to prevent rectilinear movement of lock. Invented by Edward F. Dell, Chicago, Ill. Assigned, by mesne assignments, to Davidson Corporation, a corporation of Illinois. Application September 27, 1947. 12 Claims.

2,577,099. MECHANISM FOR REGISTERING IMPRESSIONS IN MULTI-UNIT PRINTING MACHINES provides for warping a sheet in such a way as to distort the trailing edge for correcting registry of impressions without affecting registry of impressions on the leading edge of the sheet. This is accomplished by providing for the expansion of the trailing end of a sheet following a first impression by leading the sheet through a later printing couple with the middle of the leading edge of the sheet advanced with reference to the corners, whereby the trailing end of the sheet is contracted to bring the first impression into register with that of the later printing couple. Invented by Alexander J. Albrecht, West New York, N. J. Assigned to R. Hoe & Co., Inc., New York, N. Y. Application June 14, 1946. 29 Claims.

2,577,989. ROTARY PRINTING PRESS FRAME STRUCTURE, for newspaper work, provides an auxiliary frame for a color cylinder and its as-



EXCELLENT REPRODUCTION...

You judge by *results*—and in stereo work the proof of the mat is in the printing. That's why leading stereotypers always choose a BURGESS MAT.

Burgess Mats treat every character, dot and line with greater respect . . . jealously preserve the tiniest details.

The result is reproduction that rivals the original!

And most important . . . laboratory control throughout every step of manufacture keeps Burgess Mats absolutely uniform . . . *consistently* superior.

BURGESS CELLULOSE COMPANY

Manufacturers and Distributors
of Burgess Chrome and Tone-Tex Mats
FREEPORT, ILLINOIS

A Laboratory Product
BURGESS
Chrome
MATS

sociated inking mechanism and is adapted for adding color cylinders as required. The press unit comprises side frames and caps diagonally surmounted on frame. Extra frames are supported on said frame and rectangular frame blocks are adapted to support an extra cylinder. The blocks are supported on top surface of the caps and have straight and horizontal top surfaces on which extra frame surfaces are adapted to rest, being partly supported through the blocks and caps on the frames. Invented by Emory W. Worthington, Chicago, and Christopher V. Knell, Glen Ellyn, Ill. Assigned to The Goss Printing Press Co., Chicago, Ill. Application August 14, 1945. 4 Claims.

2,578,406. BLANKET CLAMP FOR BLANKET CYLINDERS OF PRINTING PRESSES. A blanket cylinder for an offset printing press comprises a cylinder adapted to be journaled in a press frame, a quoin mechanism in the cylinder for clamping one end of a flexible blanket, the quoin mechanism comprising a blanket gripping plate and wedge means for actuating the gripper plate, a shaft rotatably mounted in the cylinder, means to turn the shaft, means pivoted on the shaft adapted to clamp the other end of a flexible blanket, and a cam surface formed on the quoin mechanism to actuate the pivoted clamp means upon turning the shaft. Invented by Orville V. Dutro, La Canada, California. Assigned to Time, Inc., New York, N. Y. Application May 15, 1948. 3 Claims.

2,578,921. INKING APPARATUS FOR USE WITH INKS HAVING HIGHLY VOLATILE SOLVENTS for use with high speed rotary printing presses includes an ink fountain, a plurality of ink transferring and distributing rollers contacting with each other to feed ink as they rotate and to apply a film of ink to a rotary printing surface. There is a solvent fountain to which solvent is fed at a regulable rate to an intermediate roller to compensate for loss of ink solvent by evaporation. The solvent feeder comprises transfer rollers between the solvent fountain and one of the inking rollers. The solvent is fed to one of the inking rollers after the inking roller has transferred its film of ink. Invented by George Cramer, Peekskill, N. Y. Assigned to Sinclair and Valentine Co., New York, N. Y. Application October 29, 1949. 2 Claims.

2,579,181. ENCLOSED GRAVURE FOUNTAIN comprises a housing having side and end walls for a printing fluid and a rotatable printing cylinder in the housing parallel to and spaced from the side walls and having configurations formed by depressions extending below the peripheral surface. Means are provided for supporting a unitary and flexible doctor blade having a wiping edge bearing on the peripheral surface of the cylinder. Sealing means cover the space between the supporting means and one of the side walls and engage the doctor blade and the adjacent ends of the cylinder for sealing gaps at the end of the cylinder. A seal roll is parallel to the printing cylinder and in rolling contact with the peripheral surface thereof and is disposed between the cylinder and the other of the side walls. Means for rotating the printing cylinder and seal roll and a second seal blade are also included. Invented by Harry W. Faeber, Larchmont, N. Y. Assigned to Time, Incorporated, New York, N. Y. Application July 28, 1948. 3 Claims.

2,579,264. ROTARY PRINTING MACHINE FRAME STRUCTURE includes a double printing unit which comprises frames of inverted U-shape supporting the bearings for a pair of printing couples. The couples comprise two impression cylinders arranged side by side in parallelism and a printing cylinder for each impression cylinder is arranged below and outwardly of the same. Frames between the printing couples support vertical columns which in turn support a press superstructure. Bearing caps for the printing couples comprise parts removable to form recesses. Right and left hand added color attachments are also included. Invented by Frederick Lamatsch, Grantwood, N. J. Assigned to R. Hoe & Co., New York, N. Y. Application January 28, 1947. 4 Claims.

2,579,461. STENCIL PRINTING MACHINE is of the semi-automatic type. It includes a screen reciprocably mounted on a support and mechanism for controlling the length of the reciprocating stroke of the screen. A printing element is mounted on the support and a platen rotates on the support, below the screen. A work piece feed bed is also mounted on the support, means being provided for successively removing work pieces from the bed. A conveyor receives work pieces and leads them to the platen. The work pieces are gripped at one end of the reciprocating stroke of the screen and they are stripped from the screen at the opposite end of the reciprocating stroke. Invented by Almus C. Barlow,

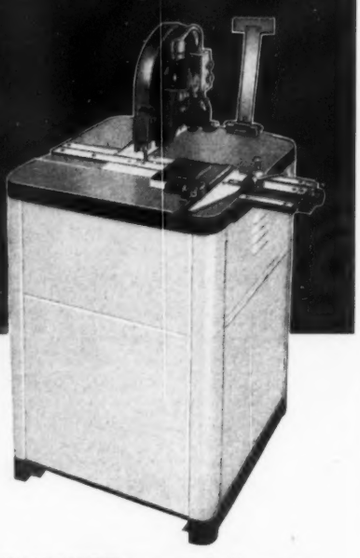
NOW!

TWO ROUSE TIME-SAVING

PLATE SAWS

With Exclusive Automatic Feed

For Photoengravers, Stereotypers, Printers



No more manual squaring up, guesswork alignment, tacking, scoring, beveling, trimming, removing burrs, using wedges. That's how a Rouse Plate Saw soon pays for itself.

Just make 4 quick, easy, automatic saw cuts and your plate is ready for the printer. The *exclusive* automatic feed guarantees each cut to be perfectly square, smooth-edged and uniform on any copper, zinc, magnesium or plastic plate, whether wood or plastic mounted or shellcast.

Cuts are made to Picas, Points, Quarter Points or Inches as required. Outside Mortising is effectively done to pica and point measurement.

NEW 24" MODEL—automatically cuts up to 24" of type-high work in only 27 seconds.

15" MODEL—identical to 24" Model except it automatically cuts up to 15" of type-high work in only 17 seconds.

BOTH MODELS occupy only 26" x 26" floor space.

NEW FEATURES (*on Both Models*)

1. Now you can make *cuts as small as 1 Pica square* for signatures, key letter or number changes, etc.
2. *Narrow Cut* measures about 2 points (.028"), permitting cutting between type lines.
3. Saw blades are changed in just 1 minute due to new lever-operated tension release. Blades stay sharp during 30-40 hours continuous operation. New blades are inexpensive.
4. New simplified gauge adjusting device makes it easier to maintain perfect squareness in cutting.

DESIGNED BY MEN WITH 25 YEARS KNOW-HOW IN BUILDING BAND SAWS FOR PRINTERS

Write for complete details TODAY!

H. B. ROUSE & COMPANY
2214 North Wayne Avenue, Chicago 14, Illinois

ROUSE PRODUCTS...The Standard of the World Since 1899

For Patent Research in the U. S. Patent Office, or a prompt estimate on any type of search, address INVENTION, INC., Munsey Bldg., Washington, D.C.

Chula Vista, and William V. Paul, Coronado, Calif. Unassigned. Application September 4, 1945. 13 Claims.

2,579,517. PRINTING MEMBERS ARE ATTACHED TO CYLINDERS OF PRINTING PRESSES by the provision of a row of teeth carried by the cylinder which teeth are adapted to be engaged in complementary holes of a lithographic plate. A clamping plate having an irregular surface opposed to the complementary member is mounted on such cylinder and is adapted to hold the ends of the lithographic plate therebetween while slightly crimping the same. The clamping plate and complementary member are mounted for conjoint movement relative to the teeth axially of the latter whereby the lithographic plate may be held firmly clamped during insertion of the teeth in and withdrawal of same from holes in the plate. Invented by George S. Rowell, Bedford, and Herbert McGeorge, Cleveland Heights, Ohio. Assigned to The Chandler & Price Co., Cleveland, Ohio. Application November 1, 1946. 18 Claims.

EXECUTIVE Cs

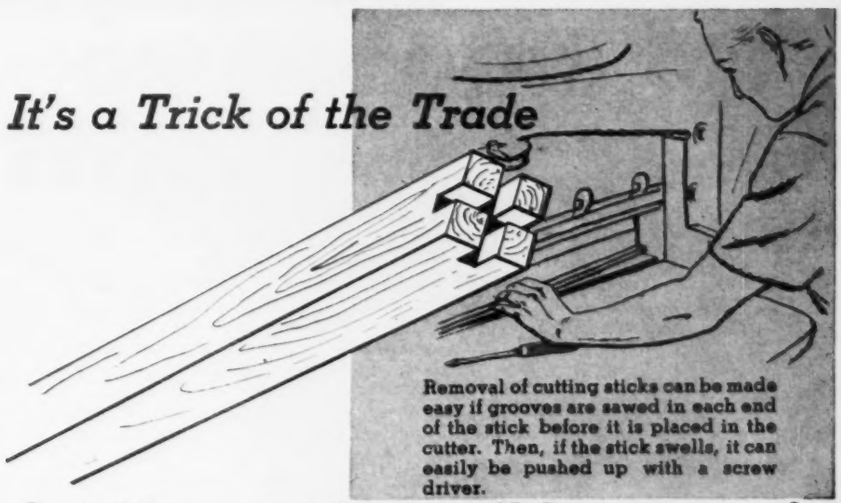
O. C. Holland has been appointed Director of Advertising and Sales Promotion of Interchemical Corporation, Printing Ink Div., according to an announcement by W. F. Cornell, President. Holland succeeds the late George Welp as assistant director for the past five years. He is a graduate of the University of Oregon and a veteran of World War II. He is now a Lieutenant Commander in the U. S. Naval Reserve.

E. R. (Bob) McDowell has been appointed Business Mgr. of the Colorado Springs (Col.) *Gazette Telegraph*, according to an announcement by Harry Hoiles, Publisher. McDowell, who has been associated with the *Gazette Telegraph* since 1947, formerly served as production and advertising manager of the paper. He started his career in the newspaper industry with the San Bernardino (Calif.) *Sun Telegram* in 1932. He has also held the positions of night foreman of the Santa Ana (Calif.) *Register* and mechanical superintendent of the Clovis (N.M.) *News-Journal*.

John F. Devine, Vice President of Sun Chemical Corp., has been appointed Chairman of the Printing Ink Committee of the New York Chapter of the Arthritis and Rheumatism Foundation. Devine will solicit printing ink manufacturers in the New York area to support the Foundation's current campaign to raise funds.

Robert H. Dunham, Asst. Vice Pres., Tingue, Brown & Co. is shown above with the eight-day ship's clock presented to him recently by the officers of the Tingue, Brown firm. The occasion marked his 25th year of service with the company. Dunham makes his headquarters at the New York office of the organization.

It's a Trick of the Trade



Removal of cutting sticks can be made easy if grooves are sawed in each end of the stick before it is placed in the cutter. Then, if the stick swells, it can easily be pushed up with a screw driver.

but it's no trick to pull better proofs

with a Challenge Proof Press

In most every magician's repertoire you'll hear this expression: "Now you see it... Now you don't!" The opposite is true with Challenge Proof Presses. Broken letters, wrong fonts and damaged cuts are brought clearly in view on Challenge proofs.

In all, there are six models to choose from:—three with cylinder grippers, so that sheets are fed to the grippers and a micrometer side guide. All feature "sleight-of-hand" action and cylinder press operation with reciprocating bed rolling on anti-friction bearings to insure easier proofing ... and accurate proofreading.

Challenge
TRADE-MARK ®
The Challenge Machinery Co.
Office, Factories and Show Room:
Grand Haven, Michigan 689

DEALERS IN ALL PRINCIPAL CITIES

Edward P. Tracht has been named Asst. Sales Mgr. of the Graphic Arts Div., Fairchild Camera and Instrument Corp. Tracht, who has been associated with Fairchild since 1949, served as Mid-West supervisor of customer engineering for the company. He established the first Scan-a-graver service center at Philadelphia and has supervised Scan-a-graver service in the Mid-West since the Chicago district office was opened in 1950. Tracht has assumed his new duties following the resignation of Fred Bates. Arthur Lawrence, formerly service engineer for Fairchild with headquarters at Moline, Ill., will become Mid-West Supervisor of Customer Engineering.

Thomas E. DePoy, New York District Mgr. for the Ludlow Typograph Co., recently passed away. Among his trade associations was membership in the New York Club of Printing House Craftsmen. He was a veteran of both World Wars and retired after World War II with the rank of major. A resident of Upper Montclair, N. J., he is survived by his wife; a daughter, Mary; and two sons, Thomas E., jr., and Donald.

Only horizontal precision color camera

with this feature: **Fully Automatic Focusing!**

Klimsch Super-Autohorika

NOW! an automatic horizontal precision color camera that's *completely* automatic!

Automatic Focusing! Focusing takes care of itself this way: the electrically powered movement of lens and copyboard is regulated by an ingeniously tooled progressive spindle so that it corresponds in every position with the focus formula of the lens. *One synchronized automatic operation does it!* No fiddling with focus, no separate adjusting of copyholder!

Built-in straight-line image reversing is another exclusive feature of the *Super-Autohorika*. A turn of a wheel reverses image. Size and focus remain exact without moving copy or camera. No extra attachments!

Compact, precision-engineered, *Super-Autohorika* comes complete with lens, filterdisc, arc-lamps, vacuum pump, automatic timer and full electrical equipment – ready to plug in and operate!

Write for full data on all 20 special features of this amazing camera. See how it speeds production, increases quality, eliminates guess-work.

Plate size: 24" x 24" — Maximum screen size 32"
Plate size: 32" x 32" — Maximum screen size 40"

Imported and distributed by:

Amsterdam Continental
Types and Graphic Equipment Inc.
268-276 Fourth Avenue, New York 10, N. Y.

Retirement of Lester M. Moss, Manager of Nela Press, and the appointment of Walter H. Frick as his successor, were announced by Fred F. Harroff, G-E Vice President and General Manager of the company's Lamp Division, at Nela Park.

WALTER H. FRICK LESTER M. MOSS

Moss' retirement follows more than 41 years of continuous service with the company. During the past 19 years, Moss served as manager of Nela Press. He was transferred from Harrison (N. J.) Glass Works to Nela Park, G.E.'s Lamp Division, Cleveland, in 1932. He was born in Altoona, Pa. From the University of Wisconsin he received his B.S. in Electrical Engineering in 1909. He is married and the father of a son, and resides at 15489 Brewster Rd., East Cleveland, O. He plans to add Florida fishing to his interests which include golf, contract bridge, and the theater.

Frick's appointment to the manager post of Nela Press became effective February 1. Frick attended grade and high school in Akron, O., and East Cleveland. After attending Fenn College, Cleveland, he joined General Electric in June, 1924. Frick devoted eight years to order and production activities for the division's glass manufacturing operations. He transferred to the service phase of Nela Press in May, 1933. A year later, he became foreman of Nela Press's offset section. He was promoted to the post of Superintendent of Nela Press in January 1940, which position he has held up to the time of his new appointment as Nela Press manager. For two terms, Frick served as president of the Cleveland Club of Printing House Craftsmen. He includes wood working and golf among his outside interests. He is married and has two children, a son and daughter. The Fricks reside at 988 Roanoke Rd., Cleveland Heights, O.

John A. Feairheller has been appointed a Sales Representative of the Type Metal Dept., Federated Metals Div., American Smelting and Refining Co. according to an announcement by William H. Pollock, Manager, Eastern Type Metal Dept. Feairheller will make his headquarters at Federated's Philadelphia sales office in the Lincoln-Liberty Bldg. His territory will include Philadelphia and Eastern Pennsylvania. He formerly was associated for six years with the Bingham Brothers Co.

Robert I. Hicks (left) has been elevated from the post of vice president in charge of sales to that of President and General Mgr. of Lamson Corporation. Appointed to the newly-created post of Manager of Sales Operations is Robert B. Coleman (right), who will direct Lamson's 19 field offices, coordinate sales and marketing activities for its four product divisions, and the selection, training and compensation of field personnel. Hicks joined Lamson as general sales manager in 1939 and has been vice president since 1941. Coleman formerly was associated with American Chain and Cable Corp. It was also announced that Francis D. Weeks has been named Chairman of the Board of the Lamson firm and will continue as Vice President and Treasurer. Carl F. Dietz, president and general manager of the company since 1938, has become President and General Mgr. of the parent company, Lamson Corp. of Delaware and of its mail tube subsidiaries.

Jack C. Huie has been named Manager of Mergenthaler Linotype Co.'s New York Agency, succeeding E. D. Betts. Huie has been with Mergenthaler since 1938 and during that time, was connected with the company's offices in New Orleans, Los Angeles and Atlanta, Ga. As a Linotype production engineer in North and South Carolina, he was instrumental in the installation of the first Teletypesetter circuit in the United States in the spring of 1951. Earlier in his career, he was associated with the Mayfield (Kan.) *Messenger*, Jackson (Tenn.) *Sun*, and newspapers in Berne, Ind., and Union City, Tenn.

Earl S. Ellis has been appointed Sales Mgr., in charge of sales outside Milwaukee (Wis.) County, of Western States Envelope Co., according to an announcement by George B. Moss, President of the company. Ellis succeeds E. Howard Roberts who is semi-retired after 28 years of service with Western States. Ellis, who has been associated with the firm since 1932, has represented Western States in Michigan, Indiana, Ohio and Kentucky, and the city of Milwaukee. He is a past president of the Milwaukee-Racine Club of Printing House Craftsmen.

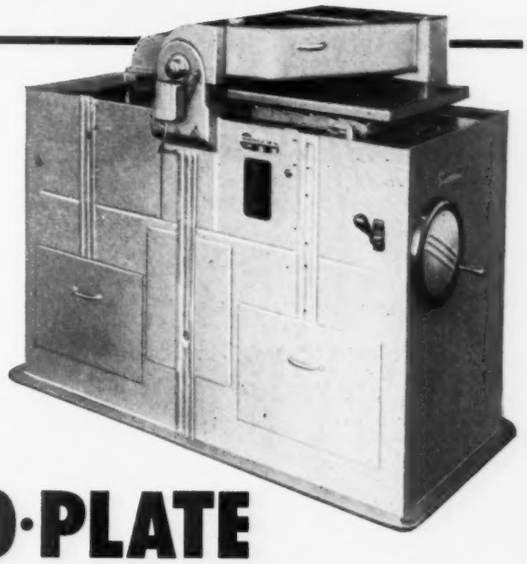
A. E. Marconetti, President of A. E. Marconetti, Inc., sailed aboard the Queen Mary recently. Marconetti, whose firm is sales agent for Kidder Press Co., will spend six weeks in Europe visiting paper converters and package printers. He will visit London, Amsterdam, Brussels, Zurich, Nice and Paris and plans to return to this country in March.

Harry R. LePoidevin and J. Donald McMurray were recently named Co-Publishers of the Racine (Wis.) *Journal-Times* to succeed the late Frank R. Starbuck, publisher of the paper. At a meeting of the Board of Directors of The Journal-Times Co., McMurray was elected President, Mrs. F. R. Starbuck, Vice Pres. and LePoidevin was re-elected Secretary-Treasurer, a position he has held for some time.

R. B. Tullis has succeeded Gordon Montgomery as President of Miller Printing Machinery Co. Since joining the Miller company 15 years ago, Tullis has served in executive capacities in both sales and manufacturing.

Saving
ON SHAVING!

Dollar for dollar the new Model D Plane-O-Plate Rotary Shaver is the best value on the market today.



New
PLANE·O·PLATE
ROTARY SHAVER

THE NEW Monomelt Plane-O-Plate is a precision, high speed rotary shaver for metal, wood and plastic. Its amazingly low cost and high work output makes it ideal for newspapers, photo-engravers, stereotypers and plastic plate makers.

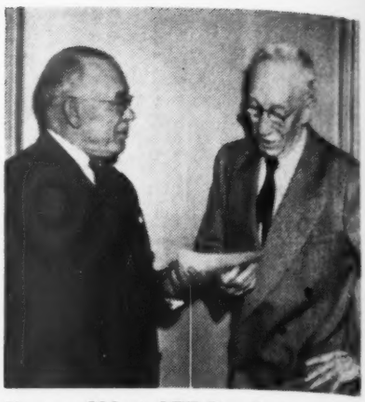
The new Plane-O-Plate is rugged and dependable. Cutter head is molybdenum steel mounted in Timken bearings. The body is made of stress-relieved welded steel, heavily reinforced. Substantial cuts are made without vibration or chatter. The Plane-O-Plate will shave a full page plate, a single small plate or a bed full of small plates at one time. Shaving capacity is from .150" to 1" . . . to .055" with auxiliary plate, available at a small extra charge. Safety features protect operator, plates and machine.

Plane-O-Plates are still available. See your dealer, or wire, write or phone for folder of complete information.

THE MONOMELT CO., Inc.
1611 N. E. POLK ST. • MINNEAPOLIS 13, MINN.

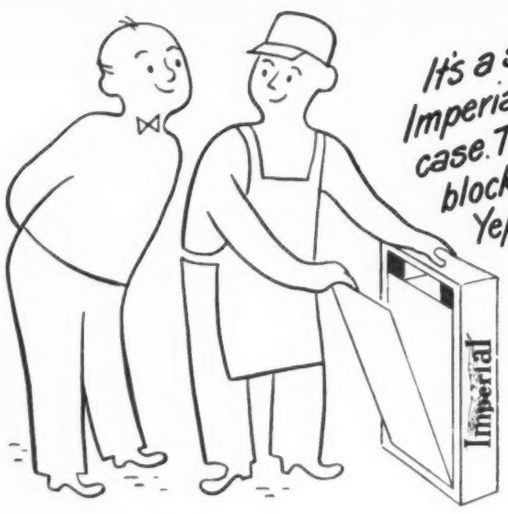
F. Irving Walsh has been assigned to the New York-Connecticut sales territory of Miehle Printing Press & Mfg. Co., according to an announcement by Carlton Mellick, Vice Pres. in Charge of Sales. Walsh, a graduate of Princeton University, has been associated with Miehle since 1946. He has served in the Installation and Service Dept. and as chief of the Technical Section. He is a veteran of World War II.

Fred A. Adame, George W. Anger and James M. Crowe have joined the sales staff of R. Hoe & Co., Inc., as field representatives. Adame has had experience in designing stereotyping and electrotyping equipment and offset presses, both paper and metal decorating. He has also served an apprenticeship in the Hoe pattern and machine shops. Anger has been engaged in inspection work at the Hoe plant and has now been assigned to assist A. Fred Gebhard in the southeastern territory. Crowe, who has been associated with the Hoe organization for four years, will assist Gilbert H. Higgins in the mid-eastern territory.



Honors Oldest ATF Employee—American Type Founders recently presented a $2000 check and a commemorative plaque to its oldest employee, Ben Woermann (right) of the Cincinnati, O., Branch. The presentation was made by ATF President Edward G. Williams. Woerman, who has completed 62 years of continuous service with ATF, is 78 years old. In other ceremonies honoring Mr. Woermann, the Cincinnati Club of Printing House Craftsmen presented him with a bound volume of congratulatory letters received from his customers.

Why do I Like Imperial ?



It's a snap to remove Imperial sheets from the case. Two little wooden blocks do the trick. Yep-Imperial keeps to heart the interests of the man in the shop.

Every case of Imperial Register-Redibak Zinc has two wooden blocks that separate the sheets from the end of the case, so the sheets are easily removed. Mighty convenient.

Imperial Zinc

A Product of

IMPERIAL TYPE METAL COMPANY

SERVING THE GRAPHIC ARTS Exclusively

PHILADELPHIA 4 • NEW YORK 7 • CHICAGO 50

In Canada: LATIMER, LIMITED, TORONTO 2B

Federated Metals Div., American Smelting and Refining Co., has made three additions to its sales staff, it was announced recently by Edgar L. Newhouse, III, Eastern Sales Mgr. They are: Alfred L. Lee, who will cover the Philadelphia, South New Jersey, and Eastern Pennsylvania areas; Edward R. Bergin, who will be sales representative in the Metropolitan New York area; and Alfred Blackstone, who will cover the states of North Carolina, South Carolina, the Eastern half of Georgia, and all but the extreme Western part of Florida. Lee formerly worked in the company's New York sales office. His headquarters will be at Federated's Philadelphia plant, Richmond and Hadley Sts. Bergin graduated from the U. S. Naval Academy in 1942 and has been associated with the Chase Brass and Copper Co. and Peterson Steel Co. Blackstone will report to A. A. Hochrein, District Mgr., with headquarters at Federated's Baltimore office.

Jack C. Heath, formerly sales promotion manager of Lawter Chemicals, Inc., has been promoted to General Sales Mgr. of the firm, according to Daniel J. Terra, President. As sales manager, Heath will continue supervision of sales promotional activities. He will also supervise the company's regional sales offices and warehouses in Philadelphia, San Francisco and Los Angeles. Heath joined the Lawter organization in 1949 as advertising manager and one year later assumed the duties of sales promotion manager.

END STATIC TROUBLES WITH
PROVED STATIC CONTROLS

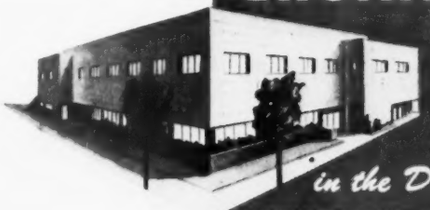
TAKK
HIGH SPEED
STATIC CONTROLS

THE JOHN HEWSON COMPANY
General Sales Agents
106 Water Street, New York 5, N. Y.

HERRICK *Inks*

WILLIAM C. HERRICK
Ink Company, Inc.
FINE NEWSPRINT, LETTERPRESS, & OFFSET INKS
EAST RUTHERFORD, N. J.

ARCHITECTS and ENGINEERS



in the Design of
NEWSPAPER AND PUBLISHING PLANTS!

35 years of experience designing New Plants,
Remodeling, Production Studies,
Survey and Reports.

A few of our achievements—
W. F. Hall Printing Company, Chicago
Brown and Bigelow, South Bend
The Milwaukee Journal, Milwaukee

BROCHURE ON REQUEST

MORTON L. PEREIRA & ASSOCIATES
ENGINEERS AND ARCHITECTS
100 West Monroe Building • Chicago 3, Illinois

FOR A BETTER METAL
BETTER PRINTING
Program

Use **Imperial**
Free Analysis Service

● Without obligation we'll be glad to send you a mailing envelope for forwarding to us a ten ounce representative sample of any type metal you want analyzed.

For Linotype, Intertype or Ludlow, send sprues collected at random from each machine. For Monotype, collect a few characters each day until you have 10 ounces. For stereotype, stir metal thoroughly at casting temperature and ladle out a sample.

Our laboratories will give your samples a thorough analysis and we'll report the exact condition of your metal and how to correct it if necessary. Another Imperial service at no charge to you. You'll find it profitable to use this service regularly as thousands of others are doing.

Imperial
TYPE METAL COMPANY
SERVING THE GRAPHIC ARTS *Exclusively*
PHILADELPHIA 34 • NEW YORK 7 • CHICAGO 50

Richard G. Griffoul resigned recently as Vice Pres., Asst. Treasurer and Works Mgr. of the Wood Newspaper Machinery Corp. Griffoul has been with the Wood organization for 15 years. He was appointed Works Mgr. in 1946 and elected Vice Pres. and Asst. Treasurer in 1947.

Allan Robinson, Principal of the Mergenthaler Vocational High School of Printing, retired recently after 27 years of service. In honor of Robinson's work and length of service, students of the Mergenthaler School published an eight page special testimonial edition of *Good Impressions*, the school newspaper. The edition included several pictures of Mr. Robinson, testimonials and a history of the school authored by the retired principal. His retirement was also the occasion for a number of luncheons and dinner parties given in his honor. He and Mrs. Robinson will winter at 718 So. B St., Lake Worth, Fla., and spend their summers at Harwich Port, Mass., on Cape Cod.

William M. O'Hara, jr., has been appointed Manager of the Metal Decorating Div., Gaetjens, Berger & Wirth, Inc., according to an announcement by William Recht, President of the firm. O'Hara will be available to render service to lithographers, printers and metal decorators. He has been active in the industry for more than 30 years.

with VULCAN press blankets

There'll be no nightmare in the pressroom when your presses roll smoothly with VULCAN press packing on the cylinders.

No other manufacturer in the world offers such a wide variety of impression cylinder packing. There is a VULCAN combination for every type of press — old or new — and every pressroom operating condition.

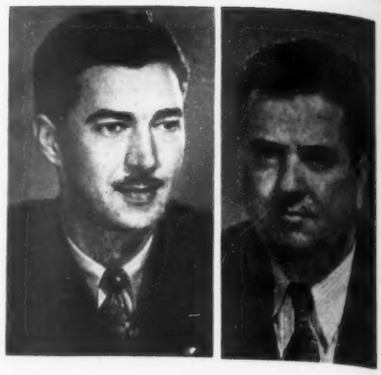
Get the benefit of the years of VULCAN research that have developed new aids to finer newspaper reproduction of black-and-white and color.

For the ultimate in faithful reproduction of solids, halftones and type areas, try the famous VULCAN #67 Non-Felt Blanket.

VULCAN RUBBER PRODUCTS, INC.

58th Street and First Avenue • Brooklyn 20, N. Y.

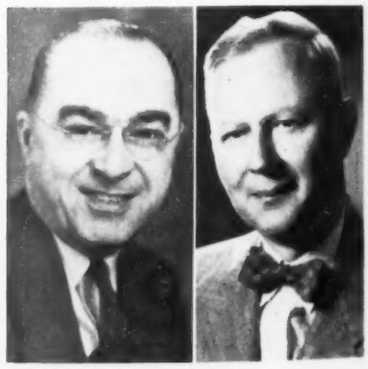
Pacific Coast Representative: The California Ink Co., Inc. *Canadian Representative:* Sears Limited, Toronto



Matrix Contrast Corp. recently announced the expansion of its Chicago Service Branch into a Western District Sales Office. Jack Faris (left), formerly western manager located in Los Angeles, has been appointed Western Sales Mgr. and will make his headquarters in Chicago. Willis Hunter, (right), Midwestern Manager, remains in his same capacity and will continue to supervise the service activities of the company in his territory.

Herman L. Smith, Executive Technical Engineer of Federated Metals Div., American Smelting and Refining Co., participated recently on the Shell Casting panel sponsored by the Wisconsin Press Assoc. for the Mechanical Institute of Publishers and Printers. Smith discussed the condition and temperature of type metal. He is the author of technical papers on the metallurgical aspects of the Graphic Arts.

Robert E. Cook, field engineer with The Timken Roller Bearing Co.'s Cleveland office, has been named to the position of Sales Engineer of the Steel and Tube Div. of Timken's Cleveland office. Cook has been associated with the company since 1939.



James A. Westhaver (left) has been appointed New York District Mgr. of the Ludlow Typograph Co. to succeed the late Thomas E. DePoy. Westhaver served as Ludlow's Boston District manager for the past four years. He is a graduate of Wentworth Institute and did post-graduate work in metallurgy at the Massachusetts Institute of Technology. Appointed to succeed Westhaver as Boston District Mgr. is Charles S. (Shep) Cleaves (right). Cleaves, who has been in the printing industry for 20 years, is a graduate of Massachusetts State College.

"ALL THIS *and* HEAVEN TOO" . . .

• In this Age of Automatics . . . Guided Missiles . . . in brief, tomorrow's tools . . .

• In this Industry . . . several operations-in-one, several profits-in-one have made the BAUM-FOLDER the Greatest "Gold-Mine" since Ben Franklin's printing "explorations."

• You know how it folds . . . pastes . . . trims . . . and folds for mailing, all in the same operation . . . and how it perforates, multiple lines in both directions at the same time . . . but . . . DO you know that something NEW has now been added . . . the BAUM-CRIMPER?

• So now . . . you turn a sheet of paper into a folded, pasted, trimmed, crimped booklet, ready for mailing. Think of this ADDITIONAL ENORMOUS SAVING . . . ENORMOUS PROFIT!

Truly . . . "ALL THIS AND HEAVEN (Profit) TOO!"

RUSSELL ERNEST BAUM, INC.
615 CHESTNUT ST. • PHILADELPHIA, PA.

ECONOMY LIFTERS

As used in the printing industry for:

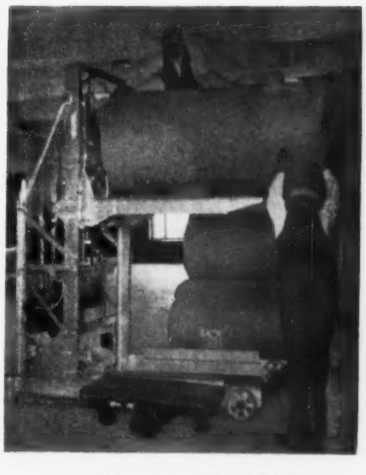
ROLL HANDLING
(any size or weight)

SKID HANDLING

BOXES, FLAT PAPER

BALES, WASTE PAPER

CARTONS



● "Handling News Print Rolls"

Other lifters available with capacities of 500 to 5000 pounds. Any platform lift and size. Hand and electric powered hoist units.

ECONOMY ENGINEERING CO.
4501 W. Lake Ave. . . . Chicago 24, Illinois

See why
Blatchford's
now the buy

Today, with costs soaring, your men and your machines must produce to capacity to earn you a profit.

For example, consider the performance of your metal stock. If it is operating below par, here are three reasons to "go Blatchford."

First, Blatchford gives you clean, solid casts. It melts smoothly, flows freely, molds sharply. *Fewer imperfect casts . . . greater operating efficiency!*

Second, Blatchford Metal gives you a slug or plate that's true to the mold. And its fluidity helps you "get" every detail of mat or matrix. *Less porosity . . . sounder plates!*

Third, Blatchford Metal gives you long, steady, clean press runs. It stands the gaff. *More dependable performance . . . fewer press stops.*

Built to save, every step of the way, Blatchford can help your skilled manpower and expensive machinery produce to capacity.

Try Blatchford. See for yourself how it can help raise your production . . . lower your costs.

Free chart for remelt rooms tells, step by step, how to keep metal "healthy" and *cut dross loss* with Blatchford Type Metal Flux. Just write, Box PE-2, the Blatchford office nearest you for "Re-melt Chart."

NATIONAL LEAD COMPANY—Atlanta, Baltimore, Chicago, Cincinnati, Cleveland, Dallas, Philadelphia, Pittsburgh, St. Louis; New York: E. W. Blatchford Co.; New England: National Lead Co. of Mass., Boston; Pacific Coast: Morris P. Kirk & Son, Inc., Los Angeles.

Blatchford
is the NATIONAL name for dependable metal . . .
*Reg. U. S. Pat. Off.

Harold B. Plaut, who has been engaged in the engineering department of Intertype Corporation, announces Vice President A. T. Mann, has been promoted to the position of Sales Promotion Mgr. The appointment became effective January 1. Plaut holds the degrees of A.M. and B.M. from Columbia University. He is well known in the Graphic Arts industry and has spoken before a number of group executive meetings from time to time.

Charles Melidosian has been appointed Sales Representative for the E. P. Lawson Co. in the Michigan and northern Ohio territory, according to D. W. Schulkind, President. Melidosian will work out of Lawson's Chicago office, but will make his headquarters in Detroit.

George E. Tribble, President of Lanston Monotype Machine Co., announces the resignation of Stanley E. Haigh as Vice Pres. in Charge of Sales, and the appointment of Clyde H. Throckmorton to be responsible for sales administration and promotion, and Carl C. Sorensen for sales engineering. Throckmorton will continue as corporate secretary. As the first step in an expansion program for its sales organization, the company also announces the employment of Melvyn J. Mickevic as a technical assistant in the home office. Mickevic is a graduate of Massachusetts Institute of Technology. Before joining the company, he was a sales engineer with J. W. Greer, connected with the New York office.

Gordon Montgomery has been elected Chairman of the Board of Directors of Miller Printing Machinery Co. Montgomery, who has served as president of the Miller company, is a member of the Board of Directors of the National Printing Equipment Assoc.

The Timken Roller Bearing Co. has announced the promotion of George J. Muntean to the position of Asst. Supt. of the Canton (O.) bearing factory. Muntean started with the Timken company in 1933.

It pays
to consult E. B. CO ...before going offset!
EBCO
22" x 34" Single Color Offset Press (Maximum Sheet 23" x 36").
Write today for the illustrated booklet describing the E. B. CO exclusive features!
PRINTING MACHINERY DIVISION • ELECTRIC BOAT COMPANY
445 PARK AVENUE, NEW YORK 22, NEW YORK
120 SO. LA SALLE STREET, CHICAGO 3, ILLINOIS
WM. M. KEMP CO., 444 MARKET STREET, SAN FRANCISCO 11, CALIFORNIA

Conference Dates

(With Organization Names and Principal Officers)

American Photoengravers Association – 1952 Convention to be held in Chicago, hotel and dates to be announced later. W. K. James, President; Frank J. Schreiber, Executive Secretary, 166 W. Van Buren St., Chicago 4, Ill.

ANPA Mechanical Conference—1952 Conference, Fairmont Hotel, San Francisco, June 9, 10 and 11. Chairman of the Committee, L. J. Griner, Production Manager, Detroit *News;* Manager ANPA Mechanical Dept., Vernon R. Spitaleri, 370 Lexington Ave., New York 17, N. Y.

Fifth District Craftsmen's Conference—1952 Conference, Hotel Statler, Detroit, tentative dates June 20 and 21. President, Robert Knox, Michigan Typesetting Co., 457 W. Fort St., Detroit, Mich.; Secretary-Treasurer, Robert Wolf, Richardson-Taylor-Globe Co., 4501 Mitchell Ave., Cincinnati 32, O.

Gravure Technical Association—Secretary-Treasurer, J. E. Hazel, Room 4800, 30 Rockefeller Plaza, New York 20, N. Y.

Great Lakes Newspaper Mechanical Conference—1953 Conference, Deshler-Wallick Hotel, Columbus, O., January 10-13. President, Harry A. Miller, Mechanical Supt., Dayton (O.) *Daily News;* Secretary-Treasurer, Don Clark, Stereotype Supt., Grand Rapids (Mich.) *Press.* Co-chairmen, Manufacturers' and Suppliers' Committee.

PIONEERS

Rotogravure Equipment and Supplies

When you think of quality and know-how, think of Pioneers in Rotogravure Printing Equipment:

STANDARD PROCESS CORPORATION
2704 West Roscoe Street
CHICAGO, ILL.

★

From 1928 to 1950 —

Printing cylinders — manufactured complete; semi-steel, centrifugally cast steel, etc.; dynamically, statically balanced; copper plated, turned, ground and polished.

Quality copper plating and repairing cylinders.

The best in cylinder grinding and polishing machines; special heads (patent pending) — with precision controlled stone pressure and automatic feed.

Pioneers in sale of artificial abrasive Intaglio grinding and polishing stones—since 1931.

Doctor blade grinders, layon machines, etching trucks, laboratory presses, gravure presses, plating equipment, etc.

Pioneers as a Rotogravure House for the Gravure Printer

★

STANDARD PROCESS CORPORATION
Manufacturing Gravure Equipment & Supplies
2704 W. Roscoe Street • Chicago 18, Ill.

LASTING IMPRESSIONS

because . . .

Wood Dry Mats
give character to newspaper reproductions.

WOOD FLONG CORPORATION
HOOSICK FALLS, N. Y.
NEW YORK CITY OFFICE:
551 FIFTH AVENUE, NEW YORK 17, N. Y.

"REGAL" MONOCORK

by

New England

This Press Blanket is by far superior to any cork packing that has ever been available to the industry!

We make this claim with no fear of contradiction. Its perfection is attested to by the fact that we have difficulty in keeping up with the demand.

No matter what your reason may be for not having these blankets on your machine, the simple truth is that you are denying yourself the best. Once you learn what "REGAL" has to offer, you too will be a constant repeat user.

YOU BE THE JUDGE!

NEW ENGLAND
FIBRE BLANKET COMPANY

164 FREMONT STREET
WORCESTER MASSACHUSETTS
BRANCHES: New York—Chicago—San Francisco—Tulsa

the SAFE WAY...
to CLEAN or SPONGE with flammable Liquids

JUSTRITE

JUSTRITE DISPENSING PLUNGER CANS

★ *FAST*
★ *SAFE*
★ *EASY*

Eliminate spilling and evaporation when cleaning or sponging with flammable liquids. Heavy terne plate and brass construction for added safety. Easily and quickly filled or cleaned. Easy downward pressure on pan dispenses required amount of liquid — can be regulated. Prevents waste. Reduces fire hazards. 1 qt., ½ gal. and 1 gal. sizes. Approved by Factory Mutuals.

Order from your Jobber.

JUSTRITE MANUFACTURING CO.

FREE CATALOG
Write Dept. PE
2061 N. Southport Ave.
CHICAGO 14, ILL.

Ray Burgoon, Sales Representative, Mergenthaler Linotype Co., 192 Haldy Ave., Columbus 4, O.; Clarence Seaman, Vice President, Imperial Type Metal Co., 1276 W. Third St., Cleveland 13, O.

Illinois Newspaper Mechanical Conference — 1952 Conference to be held in Alton, Ill., dates to be announced later. President, James B. Mawdsley, Composing Room Supt., Alton (Ill.) *Evening Telegraph;* Secretary-Treasurer, Wilbur L. Augspurger, Peoria (Ill.) Newspapers, Inc.

Intl. Assoc. Electrotypers & Stereotypers—1952 Convention, Cosmopolitan Hotel, Denver, Colo., October 13, 14, 15 and 16. President, C. C. Barnes, Ft. Wayne Engraving Co., 118-120 W. Superior St., Ft. Wayne 1, Ind.; A. P. Schloegel, Executive Secretary, 701 Leader Bldg., Cleveland 14, O.

International Association of Printing House Craftsmen—1952 Convention, Jefferson Hotel, St. Louis, August 10, 11, 12 and 13. President, J. Homer Winkler, Battelle Memorial Institute, 505 King Ave., Columbus 1, O.; Executive Secretary, Pearl E. Oldt, 18 E. Fourth St., Cincinnati 2, Ohio.

International Graphic Arts Education Association—President, George J. Bilsey, East High School, Cleveland, O.; Educational Director, Fred J. Hartman, 719 Fifteenth St., N. W., Washington 5, D. C.

International Typographic Composition Association—1952 Convention, Hotel Statler, St. Louis, Mo., October 9, 10 and 11. President, John R. Connell, Connell Typesetting Co., 302 E. Eighth St., Kansas City 6, Mo.; Frank M. Sherman, Executive Director, 1015 Chestnut St., Philadelphia 7, Pa.

ITCA Eastern District Conference — 1952 Conference, Hotel New Yorker, New York, April 25 and 26.

ITCA Mid-Winter Convention — 1952 Meeting, Hotel Shamrock, Houston, Tex., February 15 and 16.

Iowa Daily Newspaper Mechanical Conference — 1952 Conference, Blackhawk Hotel, Davenport, Ia., May 17, 18 and 19. President, Ross DeVine, Superintendent, Davenport (Ia.) *Times;* Secretary-Treasurer, Paul F. Kamler, Mechanical Supt., Clinton (Ia.) *Herald.*

Kansas Newspaper Mechanical Conference — 1952 Conference, Broadview Hotel, Wichita, Kan., September 13 and 14. President, W. A. Blackburn, Herington (Kan.) *Advertiser-Times;* Secretary-Treasurer, Larry Miller, Kansas Press Assoc., 701 Jackson St., Topeka, Kan.

Lithographers National Association — Executive Director, W. Floyd Maxwell, 420 Lexington Ave., New York 17, N. Y.

Mid-Atlantic Mechanical Conference — 1952 Conference, Bellevue-Stratford Hotel, Philadelphia, March 20, 21 and 22. Jointly sponsored by the New Jersey Press Assoc. and the Pennsylvania Newspaper Publishers Assoc. Conference Director, Theodore A. Serrill, PNPA General Mgr., 209 Telegraph Bldg., Harrisburg, Pa.

Missouri Newspaper Mechanical Conference—1952 meeting to be held in Kansas City, Mo., hotel and dates to be announced later. President, Mike Creasy, Composing Room Supt., Columbia (Mo.) *Tribune;* Secretary-Treasurer, O. K. Hammitt, Mechanical Supt., Moberly (Mo.) *Monitor-Index.*

National Association of Litho Clubs — 1952 Convention will be held in Philadelphia, hotel and dates to be announced later. President, Anthony Capello, 265 Rocklyn Rd., Upper Darby, Pa.; Secretary, Joseph H. Winterburg, Phillips & Jacobs Co., 620 Race St., Philadelphia, Pa.

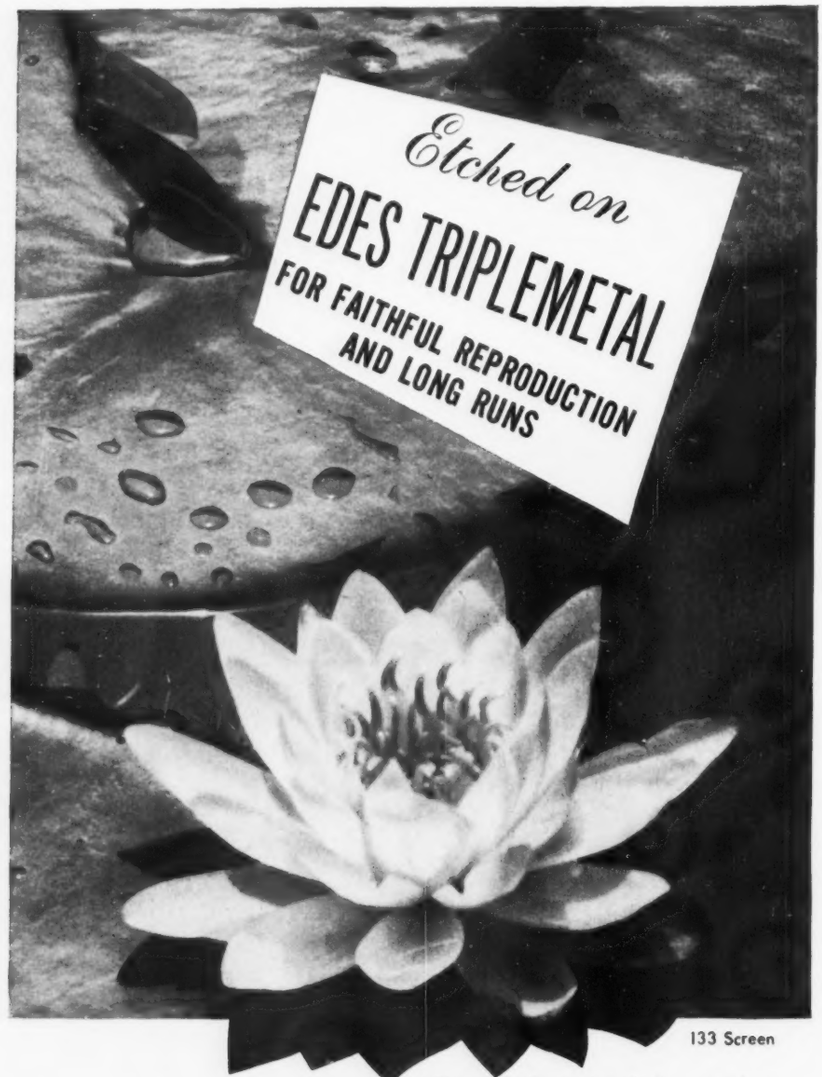
National Association of Photo-Lithographers—Executive Vice President, Walter E. Soderstrom, 317 West 45th St., New York 19, N. Y.

National Printing Equipment Association, Inc.—Place and time of 1952 annual meeting to be announced later. President, Fred S. Tipson, T. W. & C. B. Sheridan Co., 129 Lafayette St., New York 13, N. Y.; James E. Bennet, Secretary, 140 Nassau St., New York 7, N. Y.

New England Mechanical Conference — President, Howard J. Mehigan, Stereotype Supt. Bridgeport (Conn.) *Herald;* Secretary-Treasurer, Walter C. Crighton, Comp. Room Supt., New London (Conn.) *Day.*

Northwest Mechanical Conference — 1952 Conference, Hotel Duluth, Duluth, Minn., September 20, 21 and 22. President, John Breen, Mechanical Supt., Duluth (Minn.) *Herald* and *News-Tribune;* Secretary-Treasurer, Ralph Carson, Dunwoody Industrial Institute, Minneapolis, Minn.

Pacific Mechanical Conference—1952 Conference will be held in conjunction with



133 Screen

This excellent detailed reproduction is indicative of the sparkling results which can be achieved on Edes Triplemetal — a fine-grained, premium engravers' metal.

Edes
MANUFACTURING COMPANY
Plymouth, Mass. U.S.A.
THE WORLD'S FINEST PHOTOENGRAVING METALS

ZINC · COPPER · HARD MATRIX ZINC · TRIPLEMETAL

ANPA Mechanical Conference at Fairmont Hotel, San Francisco, June 9, 10 and 11. President, Clyde Bowen, *Wall Street Journal*, San Francisco; Secretary for the North, Edw. N. Conley, color press foreman, San Francisco *Chronicle*; Secretary for the South, Fred J. Moyer, Los Angeles *Daily News*.

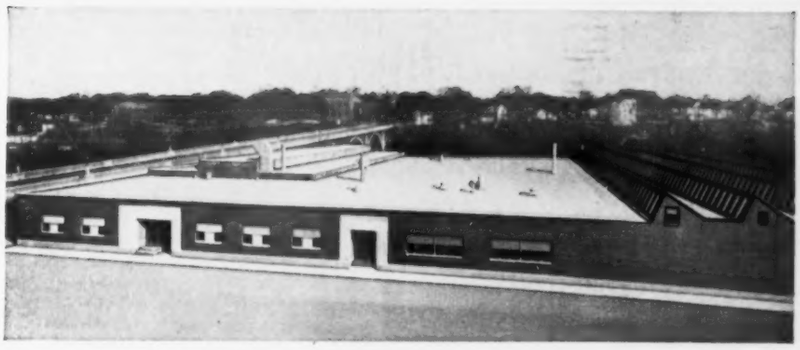
Printing Industry of America—1952 Convention, Chase and Park Plaza Hotels, St. Louis, October 12-18. President, Arthur A. Wetzel, President, Wetzel Brothers, 444 N. Broadway, Milwaukee 2, Wis.; James R. Brackett, General Manager, 719 Fifteenth St., N. W., Washington, D. C.

Research and Engineering Council of the *Graphic Arts Industry, Inc.* — President, Frank F. Pfeiffer, Reynolds & Reynolds Co., 800 Germantown Ave., Dayton, O.; Official Headquarters, Bernard Taymans, 719 Fifteenth St., N. W., Washington 5, D. C.

Screen Process Printing Association — 1952 Convention to be held in Chicago, dates and hotel to be announced later. President, John W. Key, Admiral Screen Print Corp., 627 W. Lake St., Chicago 6, Ill.

SNPA (Eastern Div.) Mechanical Conference — 1952 Conference, Andrew Jackson Hotel, Nashville, Tenn., August 25, 26. Chairman, W. D. (Red) Jacobs, Mobile (Ala.) *Press-Register;* Secretary, Ray B. Crow, Southern Newspaper Publishers Assoc., P. O. Box 1569, Chattanooga 1, Tenn.

SNPA (Western Div.) Mechanical Conference — 1952 Conference, Rice Hotel, Houston, Tex., February 24, 25, 26, 1952. Chairman, Ralph Moffett, Mechanical Supt., Dallas (Tex.) *Times-Herald;* Chairman of Supply Men's Committee, F. L. A. Gorspach, Intertype Corporation.



New Plant for Eclipse Fuel—Eclipse Fuel Engineering Co. recently moved into its new plant and office building (shown above) located on Buchanan St., Rockford, Ill. The one-story building occupies 95,200 sq. ft. which represents an expansion to triple the company's former quarters. Other developments in the Eclipse expansion program which, the firm states, will soon follow are the addition of oil-firing devices to the company's line of gas-fired equipment, and the erection of a testing laboratory for combustion research on a site opposite the new plant. Some of the features of the new plant include a system of overhead cranes, a bus duct system, electric feeder system, fluorescent lighting, air conditioned offices, an auditorium and employee cafeteria. Officials of the Eclipse company are: H. P. Howell, Chairman of the Board; A. C. Perks, President; J. H. Sands, Exec. Vice Pres. in Charge of Sales; D. A. Campbell, Vice Pres. in Charge of Research and Engineering; and K. A. Scharbau, Treasurer and Controller.

Technical Assoc. of the Graphic Arts—1952 Meeting, Hotel Carter, Cleveland, May 5, 6 and 7. President, Paul W. Dorst, 3373 Morrison Ave., Cincinnati 20, Ohio; Secretary-Treasurer, Paul J. Hartsuch, Intl. Printing Ink Div. of Interchemical Corp., 161 W. Harrison St., Chicago 5.

The HARTCO SPACEBAND MACHINE has been accepted in composing rooms as a great advance in the daily process of spaceband lubrication. Now, recent improvements in the spaceband feed of this machine make it even easier and faster to clean spacebands. There is now practically no chance of tie-ups, jams, or "doubled" spacebands.

HARTCO SPACEBAND MACHINE HAS BEEN IMPROVED to do the Job BETTER

The Hartco machine itself saves matrices, time and spacebands because it takes the human element out of a very vital job. A Hartco machine in your shop is a worthwhile investment for you to make *right now.*

TO USERS OF THE HARTCO MACHINE

If you will send your spaceband magazines to us — we will modernize them **AT NO COST TO YOU!**

PRECISION TRADE ★ MARK

LINOTYPE **PARTS** COMPANY
INCORPORATED
Factory and Main Office
SOUTH HACKENSACK, N. J.
Branch Office 1327 BROADWAY KANSAS CITY 6, MO.
CHICAGO • MINNEAPOLIS • DENVER • NEW YORK • BOSTON

Color Engraving

(Continued from Page 36)

In shooting negatives, he continued, we do not strive for a much larger dot Armation than the so-called finished dot on approx. 30 per cent tone value in the highlights is practical. Conventional procedure of completing the plate then follows. Scherer said that when the plate has been etched to within 0.005 in. depth, a re-etch is necessary. This cuts the dot in the highlights to a more finished dot, thereby gaining better depth and a dot which can be rounded off to a cone shaped dot without undercutting. This has resulted in building a good sized wall around the dot from the start and it, too, will never be in danger unless the dot is over-etched.

For example, the blue filter records the yellows, the red filter the blues, and the green filter the reds. The light coming through the lens of the camera hits the first semitransparent mirror and 32 per cent of the light is reflected to the right, to what is called the top position. The other 68 per cent is transmitted to the second mirror where 24 per cent is reflected to the inside position of the camera. The remaining 44 per cent is transmitted to the rear position. The position of the filters is determined by the filter factors of the particular film and the type and color of light being used.

The procedure followed in taking a photograph with the one-shot camera, developing the films, making the color correcting masks and bromide prints was explained for the newspaper members by Mr. Dumke and performed by Mr. Strocker while Miss Miller posed as the subject.

Mat shrinkage has failed to create any problem in the art department of the Detroit *News*, according to its Art Director, Arthur W. Czech, who appeared as the next speaker on the program. Czech reported, however, that grey tones on a photograph are lightened "a degree or two," and the black masses are broken up. Beyond that the picture is accorded the same treatment.

He asserted that proper contrast was essential for good newspaper reproduction of any print and should be in the photograph by virtue of the proper background, lighting, etc. Contrast, by the same token, he continued, does not mean a picture that has so much contrast that it has become a black and white print with middle tones and detail lost entirely. Czech advocated that photographers be shown the importance of using suitable backgrounds when taking pictures.

The art director described the best retouched picture as the one with least retouching. He explained how the airbrush is used to correct many news pictures where it is necessary that the photographer "shoot off the arm." In determining the selection of the correct background tonal value, he added, let the highest highlight determine the tone of the background, where and when a light background is called for.

Czech described heavy shadows in the face, background mergers and tricky lighting effects as some of the undesirable features of a photograph for good newspaper reproduction. The Detroit *News* has resorted to recopying the picture in order to remedy these defects. He said the copying and lightening of the heavy shadows can eliminate much hard and unnatural retouching.

The making of the bi-metal photoengraving plate as developed at the Cleveland *Press* by William F. Alexander, Photoengraving Supt., was explained to the newspaper mechanical and production executives by James A. Roane of the Engraving Dept. of the *Press*. The plate, which is made of zinc coated magnesium, reduces etching time 30 to 50 percent and eliminates mechanical routing on straight line and open-area work. A description of these plates, as well as illustrations printed from the actual plates, appeared in the January 1952 *Printing Equipment Engineer*.

How cuts are made for high shrinkage at the Detroit *News* was explained by the Photoengraving Supt. of that newspaper, Ernie Scherer. An important part of making cuts, said Scherer, is proper preparation of art copy and close cooperation between engraving and art departments. He added that cooperation from their art department has enabled him to secure

COMBINO-CUSHION CORK? TOP-CUSHION CORK-FOUNDATION?
FELT-FOUNDATION? TOP-TINGUCORK-FOUNDATION? STERLING-KORKER-
FOUNDATION? GOLD TYMPAN-FELT-FOUNDATION? COMBINO-TINGUCORK?
BETTER PRINTING
The right COMBINATION of SAFE packing will open the way to better ON time production
The greatest group of packing offered stands ready to solve your blanket problems.
Check this complete line of press packing which offers the proper gauges or combination of gauges for every press condition.
COMBINO—An extremely durable clean printing laminated blanket. Gauges .069", .083", .093".
"TINGUE" COATED FELT—For those who prefer a softer packing. Gauges .083", .093".
UNCOATED WOOL FELT—Gauges .063", .079", .083".
TOP—Drawsheet is firm, durable, economical and of long life. Gauges .016", .025", .030".
GOLD TYMPAN—Drawsheet—An old favorite for flat bed presses. Gauge .012".
IMPROVED SATISFACTION—A fabric impregnated with "Neoprene" and coated with "Calvaprene." Gauges .024", .026", .030".
STERLING—The latest plastic drawsheet Gauge .025".
CUSHION CORK*—A highly resilient underpacking. Gauges .059" to .085".
TINGUCORK*—Much firmer than "CUSHION CORK" and preferred where precision plates are available. Gauges .032", .055" to .086".
KORKER*—Under Blanket for older type presses or where an unfavorable mechanical condition exists. Gauges .058" to .070".
FOUNDATION—A firm, durable oilproof under packing laminated by duPont with "Neoprene". Gauges .032", .040", .053" to .085", .120".
*Reg. U. S. Pat. Off.
TINGUE, BROWN & CO.
723 E. Washington Blvd.
Los Angeles 21, Calif. PRospect 6023
507 Bishop Street, N.W.
Atlanta, Georgia ATwood 3864
1227 Wabash Avenue
Chicago 5, Illinois HArrison 7-0083
1765 Carter Avenue
New York 57, N. Y. CYpress 9-8800
CANADIAN SALES AGENTS ROSS WHITEHEAD & CO. LTD. MONTREAL, CAN.

CUSHMAN OFFSET MOTOR

Backed by a record of Dependable Service!

With the installation of a new CUSHMAN OFFSET MOTOR on your Linotype or Intertype machine you will see why a CUSHMAN installation is a WISE INSTALLATION. Lower in cost . . . Complete with Gear Wheel.

WRITE FOR FURTHER INFORMATION

CUSHMAN ELECTRIC CO., INC.

ASSOCIATED WITH

PRECISION TRADE ★ MARK

LINOTYPE **PARTS** COMPANY

INCORPORATED

Factory and Main Office

SOUTH HACKENSACK N J

Branch Office 1327 BROADWAY KANSAS CITY 6, MO

CHICAGO · MINNEAPOLIS · DENVER · NEW YORK · BOSTON

BEVERIDGE

New Stereotype Equipment

New stereotype equipment and improvements in old, to gain new economies and better reproductions, are continually being presented to stereotype departments. But . . . the quality of the stereotype mat still remains as the outstanding factor in final reproductions. Whether you have installed new or improved equipment or not, BEVERIDGE MATS GIVE you the best final results because of their exacting uniformity and accuracy. And you get them for any type of equipment, for newspapers or syndicate work and for any shrinkage. Your first order will convince you.

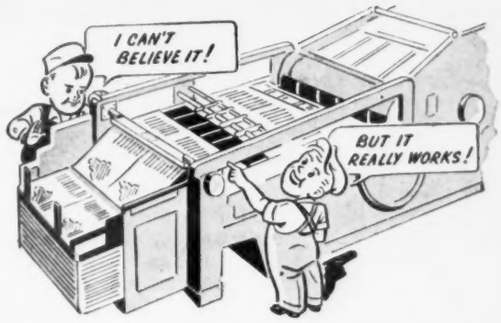
New Products Division

The Beveridge Paper Company

Indianapolis 4, Indiana

Beveridge Dry Mats

PERMANENT* CURE FOR STATIC TROUBLES



Ionotrons — an application of ATOMIC ENERGY

The Ionotron Static Eliminator® is very different from other static devices. It uses no electricity, gas, or tinsel — nothing touches the work. It costs nothing to use — its radioactive source of alpha radiation continuously drains-off static charges through the air in the trouble zone. Hundreds of installations have proved it works and is safe. Get details in booklet PE-2. *U. S. Radium Corp., 535 Pearl St., New York 7.*

IONOTRON *Static* ELIMINATOR

*Strictly speaking, nothing in the world is permanent. But since the effectiveness of Ionotrons lasts for hundreds of years, we thought this to be "permanent" in relation to the life of any printing equipment.

THE MONOMELT COMPANY

THE MONOMELT

THE PLANE-O-PLATE

THE HYDRO-CASTER

MONOMELT POWER SHEARS

MONOMELT MOLDING PRESSES

PLASTIC PLATE CURVER

VINYLITE AND ELECTROTYPERS SUPPLIES

BAKELITE MATRIX (Processed by Monomelt)

1611 N. E. Polk St. Minneapolis, Minn.

copy with objectionable characteristics eliminated, such as toned down highlights, with strong middletones and small areas of blacks.

The speaker said blacks in small areas are maintained as solids in order to gain more definite contrast between these blacks and the dark middle tones. He explained it should be understood that when he spoke of maintaining solids in the blacks, he was referring to small and detailed areas. No attempt is made to obtain solids in large areas or black masses.

Many of our production executive readers will respond to your Position Wanted Ad in the Classified Section of *Printing Equipment Engineer*. Rates on p. 75.

IPI Contest Judges Named—A panel of five judges has been announced for the 16th Annual IPI contests sponsored by Interchemical Corp., Printing Ink Div., in cooperation with the Intl. Graphic Arts Education Assoc. The judging group includes, from left to right: Harry L. Gage, Graphic Arts Consultant, Mergenthaler Linotype Co., Chairman of the Awards Committee; O. Alfred Dickman, Advertising Production Mgr., New York *Herald Tribune;* Raymond Loewy, Partner, Raymond Loewy Associates; Dr. John C. Warner, President, Carnegie Institute of Technology; and Arthur A. Wetzel, President, Printing Industry of America. This year's contest essays will be on the subject *Color Printing in a Free World*. Prizes totaling $1190 will be awarded.

HOW TO SAVE MONEY ON TYPE METAL . . . BY USING THE FEDERATED MOR-TIN® PLAN

Where there is molten type metal, there is dross. And dross is a monster which eats up tin!

When you lose tin, you have casting and printing headaches . . . you have increased costs, decreased profits.

Under the Federated MOR-TIN plan, dross from Stereotype, Linotype or Intertype, Monotype or Ludlow is replaced pound-for-pound by a high-tin adjusting alloy. MOR-TIN metal restores the elements lost in the dross and maintains your metal at its proper standard.

The cost of the MOR-TIN plan is not high, because your dross carries the burden of expense. Ship Federated your dross . . . get back MOR-TIN replacement metal for a nominal conversion charge.

If you would like further details on the MOR-TIN plan, just write Federated's Type Metal Department for free literature . . . or ask your Federated salesman next time he calls.

For type metals . . . for SAVALOY, a new stick-type flux, or SAVEMET, the dry powder flux . . . see Federated first.

Federated Metals Division

AMERICAN SMELTING AND REFINING COMPANY • 120 BROADWAY, NEW YORK 5, N. Y.

Mailing Room Mechanization

THE Mail Room Session heard of several new developments in mailing room mechanization and was treated to a movie and an actual demonstration of this equipment. The program was conducted by Co-Chairman George C. Feldt, Mail Room Supt., Milwaukee (Wis.) *Journal*, in the absence of the scheduled Chairman, Otto Lepp, Mail Room Supt., Milwaukee *Sentinel*.

The first speaker, M. S. Burroughs, Vice Pres., Dexter Folder Co., presented a movie in color on the *Dexter Stuffing Machine*. The movie showed the prototype machine in operation in the mail room of the Baltimore (Md.) *News Post*. It is designed for inserting one or more newspaper sections into a jacket at speeds up to 12,000 per hr. A complete description of the Dexter Stuffing Machine appeared in the December, 1950 issue of *Printing Equipment Engineer*. Burroughs revealed that his company is contemplating building a machine that will open a tabloid section in approximately the center for stuffing purposes.

The operation of the Saxmayer SR1C Newspaper Bundle Tying Machine was explained by its designer, E. R. Hatton, Circulation Director, Detroit *Free Press*. The machine, which ties newspaper bundles using sisal, jute or hemp twine of any ply up to 3/16 in., is manufactured by the National Bundle Tyer Co.

The machine can accommodate loose papers in stacks up to 18 in. high either manually fed or direct from a conveyer line. Bundles may be single or double tied or cross tied at the option of the operator. It will tie either flat or rolled bundles in any sequence and automatically adjusts the tie to the size of the bundle. Hatton said the machine compresses and ties up to 20 bundles per min. *Printing Equipment Engineer* carried a detailed description of the Saxmayer machine in its September, 1950, issue.

Another model of the twine tying machine described by Mr. Hatton, is the Saxmayer Model SR1A which ties round or flat bundles up to 20 in. high. The machine can produce up to 30 ties per min., according to the speaker. This machine incorporates many of the features

static running up your costs?

Your answer is the Simco "Midget"...the safest, most effective static eliminator available! Static in your presses, folders, and cutters can be very costly, but the cost of its elimination is low.

the SIMCO company
920 Master St., Philadelphia 22, Pa.

No, They are not Talking About Our Mats

Mats that are doing their job properly day after day, seldom get talked about, outside of the stereotype department . . . Quite likely these folks couldn't tell what mat the paper is using . . . Like the oil in a well lubricated bearing, Certified Mats perform without noise or notoriety.

For dependable stereotyping, rely on Certified Mats
Certified DRY MATS
CERTIFIED DRY MAT CORPORATION, 9 Rockefeller Plaza, Dept. M, New York 20, N. Y.

of the Model SR1C. It is designed for smaller operations.

Hatton next described a portable conveyor mounted on casters for mail room use which can be constructed in any length by newspapers from standard parts. In use at the Detroit *Free Press*, the conveyor carries stacks of loose papers or tied bundles along the maple or birch top by three flat ¾ in. chains on top of the table.

The chains run 3½ in. apart and between ½ in. steel guide strips of 3/16 in. thickness. He claimed there is no vibration or shiver to spill the papers and it is practically noisless when in operation.

The speaker said the conveyor can be used for moving a stack of loose papers direct from the press or tied bundles can be stopped with the hand or elbow anywhere without stopping the conveyor. He added that it can also be used for feeding tying machines for it is possible to retard the bundle to adjust the count, put on the top wrapper or mark it.

Operated by a ½ h.p. motor, the conveyor can be equipped with push button controls at either end and a switch to reverse the direction of movement at will. Hatton remarked that such conveyors could be constructed in lengths from 5 ft. to 23 ft. and offered the mechanical executives the construction blueprints with his compliments for building any length.

Next on the program was a demonstration of the Automatic Graphotype machine for embossing Addressograph mailing plates which was used in conjunction with a Flexowriter, an electric typewriter that also produces the perforated tape for actuating the Graphotype. This was presented by H. C. Woodland of the Methods Dept. of Addressograph-Multigraph Corp., Cleveland, O. A description, as well as illustrations, of these machines will appear in an early issue of *Printing Equipment Engineer*.

Brief mention of a new stacking and counting device was made by A. H. James of Cutler-Hammer, Inc., sho said it would be several months before his company would be able to make an announcement of the details of the machine. He added that the first model will be installed at the Milwaukee *Journal*.

(*Continued on Page 74*)

CHAS. T. MAIN, INC.
CONSULTING ENGINEERS
Layouts • Designs • Specifications
and Engineering Supervision
NEWSPAPER AND PRINTING PLANTS
Structural, Mechanical and Electrical Engineering
80 Federal Street Boston 10, Mass.

SpeedFlex
THE FASTEST, MOST MODERN JOB PRESS!
for mailing pieces, throw aways, inserts, and all types of form printing

Designed and sold exclusively by Orville Dutro & Son, Inc. Manufactured by Western Gear Works, oldest and largest manufacturer of geared products in the West.
COUPON BRINGS DETAILS
Orville Dutro & Son, Inc.
1206 Maple Ave., Los Angeles 15, Calif.
Please send us full information on SPEEDFLEX high-speed, multiple operation rotary presses.
NAME
ADDRESS
CITY ZONE STATE

FORCE mh rotary
NUMBERING HEADS
. . . speed production!
For clear impression numbering (up to 30,000 per hour) on practically every type of rotary press. Straight or convex heads. 7 wheels, 3/16" or 1/4" Gothic or Roman figures. Forward or backward movements. For continuous forms of all types. Force Designs make complicated jobs easy.
Send for Catalog J.
WM. A. FORCE
& COMPANY, INCORPORATED
216 NICHOLS AVENUE, BROOKLYN 8, N. Y.

NEWSPAPER & PRINTING PLANT ENGINEERING

NEW BUILDINGS • MODERNIZATION
SURVEYS • CONSULTATION

ROBERT W. DICKERSON
2063 EAST 4TH STREET • CLEVELAND 15, OHIO

(*Continued from Page 73*)

A description of the Wiretyer Newspaper Bundle Tying Machine designed for wrapping bundles with one or two strands of wire at 30 bundles per min., was given by William H. Hayford, Vice Pres., Wiretyer Corporation. The pneumatic machine is equipped with a straightening device which racks the bundle into position and holds it in place.

Hayford said the bundles can be compressed under from 10 or 15 lbs. to approx. 1 T. pressure. The machine uses 17 ga. wire. One of the recent improvements made in the machine and reported by the speaker is the change in the table height which was dropped to the height of the conveyor. An article on the Wiretyer machine was published in the July, 1951, issue of *Printing Equipment Engineer*.

The mail room session was concluded with remarks by Chairman Feldt who reviewed in brief some of the important developments in newspaper mailing operations in late years. Some of these, he added, have brought this department a long way since the day when mailing lists were prepared from stick type at the Milwaukee *Journal*.

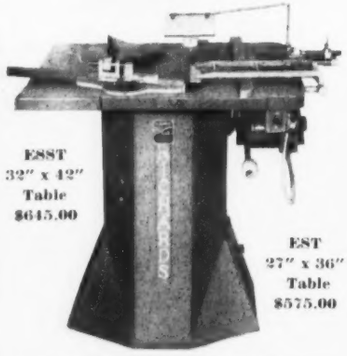
Please take a look at your address on the wrapper in which *Printing Equipment Engineer* is sent to you at your place of employment. If it isn't correct, please tell us about it on a postcard.

Literature is available describing any of the six Miller Automatic Cylinder Presses. Write today giving the size of press in which you are interested.

Miller Printing
Machinery Co.
1103 Reedsdale St.
Pittsburgh 12, Pa.

BOOKLET FOLDER & TAG STRINGING
tags
DIE-CUT STRING TAGS
20 STOCK COLORS
MANY GRADES & SIZES & OVERSIZE DIMENSIONS
Plain or Printed Tags; made single, gangs, fanfold; holes, slots, perforations, brass eyelets, numbers.
BUTTON TAG GANGS
PATCH-EYELET RE-INFORCING
FANFOLD TAGS
DIE-CUT TAGS
Printed in colors, strung, ready to use.
WIRES, STRINGS
STRINGING
We punch-string your own Booklets, Cards, Tickets, Tags, Folders. Tied in 100's and boxed.
Tags made from your own stock, complete with wires, strings, etc.
A Thousand or a Million
METAL FASTENERS
TAG ENVELOPES RE-INFORCED
STANDARD TAG CO.
ESTABLISHED 1923
TAG MAKERS & STRINGERS
65 DUANE STREET
NEW YORK 7, N. Y.

RICHARDS'
"Electromatic"
Efficiency Plus



A HEAVY DUTY SAW
For Stereotypers—Electrotypers —Photo Engravers.
PRECISION GAUGES
Instant change to SAW-TRIM
J. A. RICHARDS CO.
Kalamazoo, Michigan

CHECK ON YOUR SUPPLY OF BOOTH'S ZINK CUT CEMENT

We suggest that the hundreds of users of BOOTH'S ZINK CUT CEMENT check on their supply right now. If you are low, get your order in now for this outstanding cut cement for mounting cuts and solidifying type elements for standing ads. If you have never used this famous cut cement, try it. You'll find it mounts cuts quicker and holds them tighter . . . in use all over the country by leading plants.

Prices: 75c per tube, $6.00 per dozen in the United States.

E. A. BOOTH RUBBER CO.
2855 Scarboro Road
Cleveland Heights, Ohio

SPEEDAUMAT MAILER • Model MC for Newspapers
¼ page folder, AC motor—Prints 11000 addresses per hour
for Illustrations and Description write
JOHN GRIFFITHS CO., INC.
11 West 42nd St. New York 18

WEB DRYING APPARATUS
for ROTOGRAVURE • WEB-OFFSET • ANALINE LETTERPRESS
B. OFFEN & CO.
168 N. Michigan Ave. Chicago 1, Illinois

CLASSIFIED ADVERTISING

ALL CLASSIFICATIONS

$.75 per line 1 9/16" wide. Minimum ad 5 lines, 29 characters per line. Cash with order.

CLOSING DATE—15th of Month preceding Date of Issue

We will forward all mail addressed to Box Numbers. When answering Box Numbered ads, address as follows: Box Number . . . PRINTING EQUIPMENT Engineer, 1276 West 3rd Street, Cleveland 13, Ohio.

FOR SALE

Davidson Dual Offset Press, $975, size 10 x 14, Model 816. Has been used very little and is in good condition. Write Shield Press, 2020 Montcalm St., Indianapolis 2, Indiana.

NOW AVAILABLE

Two good used Hoe jig saw and drill combinations. Will sacrifice. Send us your offers. American Printing Machinery Co., Inc., 88 Gold St., N. Y. C.

Mechanical Executives are invited to submit to the editor ideas and production helps. Our readers will appreciate your courtesy.

★ **STAR CUT CEMENT** ★

Since 1936 — *For Mounting* — Since 1936

CUTS. .STEREOTYPES...ELECTROTYPES

66c per tube-$5.50 per doz. $5.00 per doz. in two doz. lots, $4 50 per doz. in gross lots.

★ STAR CEMENT COMPANY ★
45 Malone Avenue, BELLEVILLE 9, N.J.

The **R & B**
EXTENSION DELIVERIES
for MIEHLE, BABCOCK, PREMIER and other presses
•
AUTOMATIC PAPER LIFTS
•
Special purpose equipment for the Graphic Arts Industry
CONSULT US ON YOUR PARTICULAR PROBLEM
THE RATHBUN & BIRD COMPANY, INC.
DESIGNERS AND MANUFACTURERS • FOUNDED 1898
DEPT. PE 379 WEST BROADWAY NEW YORK 12 N. Y.

SALE OF PLANTS • APPRAISALS • SURVEYS
ROBT. ROYDEN GREER
Printing Engineer
5201 WILSHIRE BLVD., LOS ANGELES 36
PLANT LAYOUT • LABOR-SAVING RECOMMENDATIONS

THE DOYLE INFRARED DRYER
Patented
for all types of printing machinery
THE DOYLE VACUUM SHEET CLEANER
Patented
Removes dirt, dust, lint and dry spray from paper while printing
The J. E. Doyle Co., 1220 West 6th St., Cleveland 13, Ohio

CLINE-WESTINGHOUSE
ELECTRICAL EQUIPMENT
Unit Press Drives . . . Reels . . . Automatic Tensions . . . Speed Pasters provide safety and reliability with economy. Whether large or small . . . letterpress or offset . . . your press-room can rely on Cline-Westinghouse Electrical Equipment.
CLINE ELECTRIC MFG. CO.
MAIN OFFICE: 3405 W. 47th St., Chicago 32
410 Bush St. San Francisco — 220 E. 42nd St. New York City

VANDERCOOK
PRE-PRESS EQUIPMENT
Manufactured by the largest producer of proof presses and other pre-press equipment for letterpress, offset and gravure. *Write for a catalog.*
VANDERCOOK & SONS, INC.
900 North Kilpatrick Avenue • Chicago 51, Illinois
VANDERCOOK PRE-PRESS ...CUTS COSTS!

NEWSPAPER PRESSES
•
COMPLETE PLANTS
•
LETTERPRESS and OFFSET
•
BINDERY EQUIPMENT
BEN SHULMAN
ASSOCIATES, INC.
500 FIFTH AVE. • NEW YORK 18, N. Y.
Phone: BRyant 9-1132

To Market Fairchild Machine Abroad—Representatives of two firms in Norway and Sweden who will handle the installation of the Fairchild Scan-a-graver in newspapers in those countries, recently visited the plant of the Fairchild Camera and Instrument Corp. Shown here with the Scan-a-graver are, from left to right: Kaye Weedon, Photographic Engineer, J. L. Nerlien A/S, Oslo, Norway; Erik Nilson, Electronic Engineer, Ingeniorsfirma Hugo Tillquist, Stockholm, Sweden; F. V. Krummrich, Fairchild Export Mgr.; and C. A. Harrison, Fairchild Vice Pres. of Commercial Sales. Weedon and Nilson expect to have demonstration machines operating in Oslo or Stockholm by May. The Fairchild company reports that over 625 newspapers and commercial printing plants in this country have installed the Scan-a-graver machine.

Forms Advisory Service

Norman A. Mack has announced the formation of Norman A. Mack & Associates located at 608 S. Dearborn St., Chicago 5, Ill. Mack states that the group will provide an advisory service to manufacturers and distributors of lithographic equipment, supplies and products on processes, product evaluation, market research, technical manuals, field testing of products, technical sales training and distribution surveys. He has been associated with Roberts and Porter and Makin Lithoplate Graining Co., Chicago. He is a member of the Research Committee of the Lithographic Technical Foundation and a founder-member of the Technical Assoc. of the Graphic Arts.

Norman A. Mack, who has formed the Norman A. Mack & Associates, Chicago, a lithographic advisory service.

Reliance Annual Report

In its annual report to shareholders and employees for the fiscal year ended October 31, 1951, Reliance Electric and Engineering Co. shows actual industrial installations of Reliance motor drives. The company reports that shipments during fiscal 1951 totaled more than $33 million. It is pointed out that the year's volume of business is the greatest in the company's history. J. W. Corey, President of the firm, stated that if the present rate of operation is maintained, total shipments for 1952 should exceed $40 million.

New Plant for Los Angeles Firm—Shown above is an artist's drawing of the new, two-story building rapidly nearing completion for Universal Printing & Lithograph Co., located at 1850 Beverly Blvd., Los Angeles. The modern facilities will devote 3000 sq. ft. to production and sales offices with 12,000 sq. ft. allocated to offset and letterpress operations. Among the new pieces of equipment being added to the plant are a 36 in. by 48 in. Harris offset press, 50 in. automatic paper cutter, and increased platemaking and stripping facilities. Further equipment expansion is contemplated during the year, it was reported. Layout of the plant has provided for straight line production, all one level. The large press equipment will be erected on reinforced concrete and steel beds. Special pads are to be placed under presses and bindery equipment to eliminate surface vibration. Another feature of the new building is thermostatically controlled heating equipment.

ADVERTISERS' INDEX
February 1952

P. E. E. REPRESENTATIVES

WILLIAM L. OSBORN, Eastern Manager, 1712 Grand Central Terminal, New York 17, N. Y. Phone MUrray Hill 6-5980.

MELBURN O. SIMMONS, Mid-West Manager 333 North Michigan Ave., Chicago 11, Ill. Phone DEarborn 2-6467.

American Type Founders 15, 16
Amsterdam Continental Type and Graphic Equipment, Inc 60

Baum, Russell Ernest, Inc 63
Beveridge Paper Co., New Products Div 63
Bingham's, Sam'l, Son Mfg. Co 73
Blatchford Div., National Lead Co 14
Booth, The E. A., Rubber Co 63
Burgess Cellulose Co 74
..... 57

Certified Dry Mat Corp 73
Challenge Machinery Co., The 73
Chandler & Price Co., The 59
Cline Electric Mfg. Co 4
Cottrell, C. B., & Sons Co 75
..... 21

Dayton Rubber Co 6
Dexter Folder Co 23
Dickerson, Robert W 74
Doyle, The J. E., Co 74
Dutro, Orville, & Son, Inc 72
..... 73

Eastern Newspaper Supply, Inc 55
Economy Engineering Co 65
Edes Mfg. Co 68
Electric Boat Co., Printing Machinery Div 66

Federated Metals Div., American Smelting & Refining Co 72
Force, Wm. A., & Co., Inc 74

General Electric Co 11
Goss Printing Press Co., The 2
Greer, Robert Royden 73
Griffiths, The John, Co 74

Hammond Machinery Builders, Inc ..... Inside back cover
Harris-Seybold Co 18, 19
Herrick, Wm. C., Ink Co., Inc 63
Hewson, The John, Co., Inc 63
Hoe, R., & Co., Inc 12

Imperial Type Metal Co 62, 63
International Printing Ink. Div. Interchemical Corp 8
Intertype Corporation ..... Outside back cover

Justrite Mfg. Co 67

Linotype Parts Co., Inc 69, 71
Ludlow Typograph Co 7

Main, Chas. T., Inc 73
Matrix Contrast Corp 28
Mergenthaler Linotype Co 33
Miami Valley Coated Paper Co., The 30
Miehle Printing Press & Mfg. Co 10
Miller Printing Machinery Co 74
Monomelt Co., Inc., The 61, 71
Morrison Company, The 22

New England Fibre Blanket Co 67
Nolan Corporation 54

Offen, B., & Co 74

Pereira, Morton L., Associates 63

Rathbun & Bird Co., Inc., The 75
Richards, J. A., Co 74
Rosback, F. P., Co 56
Rouse, H. B., & Co 58

Scott, Walter, & Co., Inc 11
Shulman, Ben, Associates, Inc 75
Simco Company, The 72
Sta-Hi Corporation 1
Standard Process Corp 67
Standard Tag Co 74
Star Cement Co 75
Stereotex Machinery Co 54
Strong Electric Corp ..... Inside front cover

Timken Roller Bearing Co., The 3
Tingue, Brown & Co 70

U. S. Radium Corp 71

Vandercook & Sons, Inc 75
Vulcan Rubber Products, Inc 66

Webendorfer Div., American Type Founders 17
Wood Flong Corp 67
Wood Newspaper Machinery Corp 9

STEP UP and CAST FAST WITH A HAMMOND *EasyKaster* "8"

MODEL EK-8P ELECTRIC

HAMMOND *EasyKaster* "8"

- Gas or Electric 800 lb. capacity valve controlled melting pot.
- Automatic Metal Temperature Control.
- Automatic and Balanced 4-point lock-up.
- Easy Operation—bed *rolls* into place.
- Available without melting pot—Model EK-8.

5 and 6 column *EasyKasters*

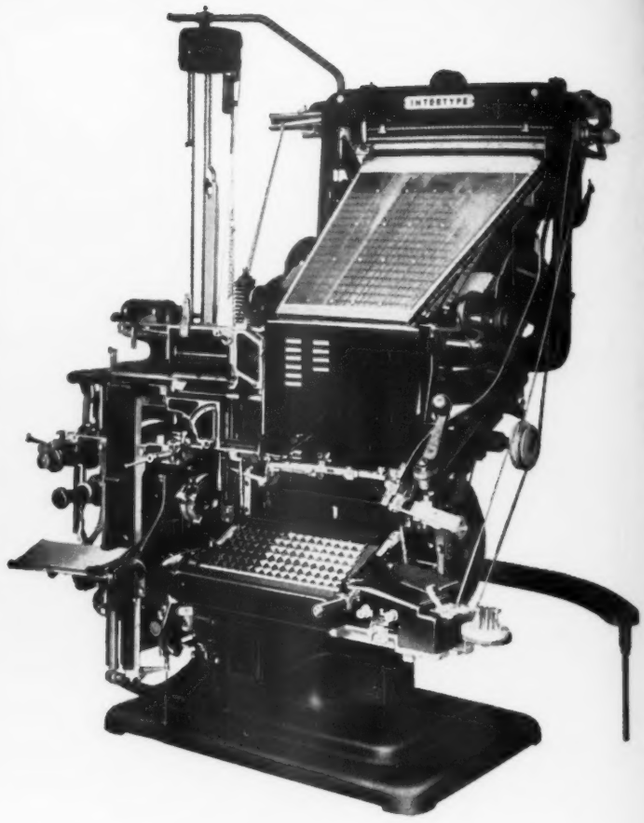
Gas or Electric 400 lb. Capacity Melting Pot.

Automatic Metal Temperature Control.

Hammond Machinery Builders INC

1604 DOUGLAS AVENUE KALAMAZOO, MICHIGAN

New High-Speed INTERTYPE for ... Extra Fast ... Dependable ... Automatic operation



This new High-Speed machine retains many important, original mechanical features that have always rendered the Intertype® capable of more speed than required by manual operation... Among them are:

[1] One-piece magazine escapements.

[2] One-section reed assembly with direct-acting reeds.

[3] Fast positive assembler.

[4] Proportional spacing of channel entrances.

[5] Extra large metal pot with the new Partlow heat control.

[6] Three-pitch distributor screw that permits very rapid distribution of matrices.

[7] Pedestal base and streamlined construction which lowers machine center of gravity, thus minimizing machine vibration and assuring smooth distribution.

[8] Fast, light-touch keyboard.

Also built into this new Intertype High-Speed machine are new parts and assemblies located at places where wear and stress are important. Each is engineered for durability and continuous performance.

Of further importance to Intertype users is the fact that Intertype alone gives you the following exclusive advantages:

Only Intertype offers the High-Speed machine in one, two, three or four magazine models.

Only Intertype offers the conversion—right in your own plant—of any pedestal base Model C machine to high-speed operation.

Only Intertype offers Visilite® magazines through which matrices travel really fast. These magazines also allow you to check your matrices at a glance.

An Intertype representative will gladly arrange a demonstration of the new High-Speed machine at our nearest district office... See addresses below.

Intertype Corporation, Brooklyn 2, N. Y. Chicago 10, Ill. Los Angeles 15, Cal. San Francisco 11, Cal. New Orleans 10, La. Boston 10, Mass.

For HIGH-SPEED Typesetting ... Look to Progressive INTERTYPE